ISSUED EVERY WEDNESDAY

DRUG & CHEMICAL

SUBSCRIPTION:—U. S. CUBA & MEXICO \$4.00 CANADA \$4.50 FOREIGN \$5.00 A YEAR IN ADVANCE Entered as second-class matter Dec. 7, 1914, at New York Postoffice

DRUG & CHEMICAL MARKETS, INC., PUBLISHERS No. 3 Park Place, New York, U. S. A.

Vol. IX

NEW YORK, SEPTEMBER 14, 1921

No. 11

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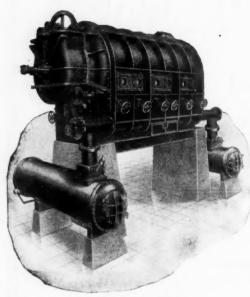
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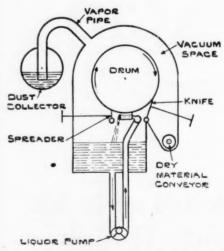
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DRUG & CHEMICAL MARKETS

ESTABLISHED IN SEPTEMBER 1914 AS "WEEKLY DRUG MARKETS"

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NEW YORK, SEPTEMBER 14, 1921

No. 11

Entered as second-class matter, Dec. 7, 1914, at the post office at New York, N. Y., under the Act of March 3, 1879.

PUBLISHED EVERY WEDNESDAY BY

DRUG & CHEMICAL MARKETS, INC.

WILLIAMS HAYNES, President
IRA P. MacNAIR, Secretary F. F. BURGIN, Treasurer
Publication Office

3 Park Place, New York, U. S. A. Telephone 7646 Barclay Cable Chemmarket

SUBSCRIPTION RATES

United States, Cuba and Mexico \$4.00 a year; Canada \$4.50 and Foreign \$5.00 a year, payable in advance. Current Copies, 10 cents. Back Copies, 25 cents. A Binder for this Journal @ \$1.00 Postpaid.

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WHAT THE EXPOSITION TEACHES

A miniature city of pagodas stretches before the eye of the visitor entering the Armory of the Eighth Coast Artillery, this week, each booth typifying the progress made in some branch of the chemical industry during the war years and since. It was a happy idea on the part of the managers to present the myriad exhibits on one floor. The effect is more impressive than was the case in former expositions when the space limits required the use of three or four floors, giving a restricted view of the show. The phenomenal ramifications of the industry are better appreciated when one sees the Exposition at a glance, just as a regiment impresses its size, strength and power more effectively when seen en masse than if viewed by companies.

In reviewing the world's progress during the last fifty years we naturally think of those inventions which have contributed to our personal comfort and which are observable in every-day lifethe telephone, automobile, electric light-and overlook the vast field of chemistry where the development has been equally important to our welfare. but not so spectacular. In the seclusion of the laboratory the chemist has worked out problems for national safety and developed processes for industrial progress which are to be seen at the Exposition in concrete form as products that testify to the ingenuity and efficiency of the American scientist. The exhibits could be studied profitably the year round in a permanent museum, but every one should devote a day at least to a survey of the general progress made in pharmaceuticals to protect the public health, in dyes to give stimulating color to a drab world, in coal-tar intermediates with which the most powerful explosives can be made, in perfumes to please the senses, in anaesthetics to alleviate pain, and in industrial chemicals which make numerous other industries possible.

WAGES AND COST OF PRODUCTION

Women and children form a large part of Japanese factory labor. Even in coal mines in one district 40 per cent of the labor is female. The women and young girls are gathered from country districts and housed in factory boarding houses where they are fed on boiled rice chiefly. The hours of work are 12 to 13 in most industries. Wages have not risen in proportion to the cost of living and are extremely low compared with standards in England or on the Continent. Adult male workers receive about 75 cents per day on an average and the highest wages paid are about \$1.75 per day.

The tendency to employ children is apparent in Germany also. The relaxation in the control of the

employment of children began with the recent war when they were called upon to take the positions made vacant by the repeated calls for troops which stripped the industrial centers. The situation has continued unchanged owing to the enormous losses in battle and the reluctance of employers to pay higher wages. The laws are so easily evaded and the fines imposed are so light that manufacturers are not deterred from continuing the practice of employing children in all possible capacities.

India, which manufactures proprietary medicines to some extent and is ambitious to build up a chemical industry, has a maximum working day of 12 hours for men, 11 hours for women and 6 hours for children between the ages of 9 and 14 years. The day on which a boy completes his fourteenth year he may work 12 hours a day. These regulations under the Indian Factories Act apply only to mills employing 50 or more. Workers in smaller factories are not protected, and factory inspection is not strict.

These three countries with populations so large that manual labor is always available at low wages are producing products that compete with American industries in our home markets. Production costs are so low in Japan and Germany that chemicals, for illustration, can be shipped to the United States and sold at lower prices than the cost of manufacture in this country. The American wage earner could not live on the wages paid in Germany or Japan, and would not attempt to retrench and live as do the underpaid workers in those countries. To offset the difference in the cost of production due to low wages is the main problem which faces Congress, but other questions enter into the situation as in the case of German dyes which would be imported in sufficient quantities to supply the entire American market at prices below the cost of production here, were it not for the dye license provisions of the Emergency Tariff Act.

THE VANILLIN SUIT

The suit of Morana, Incorporated, against Andrew W. Mellon, Secretary of the Treasury, in the Supreme Court of the District of Columbia, marks the opening step to determine the practical legality of the licensing system operating under the Fordney Emergency Tariff Act. Morana has petitioned the Washington court for a writ of mandamus against the Secretary of the Treasury, commanding the latter to issue a license to the essential oil house permitting them to import one thousand pounds of vanillin. The petitioner claims that the American price is excessive and that a combination between certain American manufacturers and foreign producers exists, the chief purpose of which is to maintain a high price. It is claimed, that vanillin can be imported from Europe at a much cheaper price but that the petitioner is prevented from bringing in this item because of the refusal of the Treasury Department to issue him a license, and consequently the Government becomes a factor in assisting a manufacturer to raise prices to an unfair level.

About a year ago, the price of vanillin was 85c

per ounce. To-day it stands at 50c per ounce as named here by American manufacturers. For the past four months, the Emergency Tariff has been in effect and no foreign vanillin, except that which came in on license issued prior to May 27th last. has been imported. Still during the four months noted, the American makers have made no advance in price. True, oil of cloves has moved down from \$2.40 a year ago, to-day standing at about \$1.75. The past few weeks, however, has seen clove oil rise from \$1.25 to \$1.75, but vanillin has been held unchanged at 50c by American makers. This price is certainly not excessive in view of the cost of manufacture. If Morana intends to base its fight on the "fair price and quality" issue of the license system, vanillin certainly does not appear to be the best case which might have been selected. It is only one of several thousands of chemical products which can be made in Europe cheaper-when figured on a basis of American gold-than in the United States, owing to comparatively cheap labor abroad and the shattered condition of European exchange rates. The vanillin case reverts back to the same old issue. Are we going to have an American synthetic chemical industry at all? If we are, we must protect it; if not, then open the gates and Europe will do the rest. Morana's suit, however, is a good thing as it will bring the matter to a definite settlement and give the trade some idea where it stands on the license issue question.

Public sentiment toward Union labor will suffer a sharp reaction if Samuel Gompers continues to condone the pillage and bloodshed by striking miners in the Mingo district of West Virginia. Full of false courage due to imbibing freely of moonshine whiskey these men defy the local, state and Federal authorities. They failed to heed President Harding's warning for them to disperse and obey the laws. Does Gompers believe that he is helping the miners' cause by advocating rebellion?

Sam Gompers blaming the American manufacturers for falling prices and curtailed production and unemployment is almost as logical as the little boy who blamed his tummy ache on his mother because she made the raspberry jam he purloined from the pantry shelf.

One of the Chicago apparatus manufacturers at the show was overheard to say: "Of course I am prejudiced in favor of the Middle West, but wouldn't it be a good idea to hold the Exposition in New York City?"

Up to the time of going to press, no question has been raised at the many sessions of the various Sections of the A. C. S. that nearly approaches in interest the thrilling inquiry regarding the biology of the whale which Dr. Allen Rogers asked the members at a previous meeting.

It is predicted that Chemical Exposition up in the Bronx this year will be most gratifying to all exhibitors who are anxious to give away samples. Ain't it the truth, Mawruss?

Master Key Industry on Display

Senator Lenroot, Dr. Herty and Brigadier-General Fries Emphasize the Importance of Developing the Chemical Industry for National Defense - Attendance Exceeds Previous Years









Bernhard C. Hesse Member Advisory Com. Chem. Co-Manager Chem. Exposition Copyright, Underw'd & Underwood Photo by Underwood & Underwood

Charles F. Roth

F. W. Payne Co-Manager Chem. Exposition Member Advisory Com. Chem. Photo by Walinger, Chicago Exposition

ATIONAL defense through scientific preparedness rather than armament was the keynote in the formal opening of the Seventh Annual Exposition of Chemical Industries in the 8th Regiment Armory. on Monday. "We can be prepared to defend ourselves at practically no cost by the encouragement and development of the chemical industry," said Senator Irvine L. Lenroot in his address at the formal opening on Monday evening. Dr. Chas. H. Herty, chairman of the advisory committee of the exposition, and Brigadier-General Amos A. Fries, of the Chemical Warfare Service, emphasized the same point in their addresses at the opening meeting, pointing out the accomplishments of the United States in scientific warfare and the hope that this valuable work might be continued through adequate protection of the industry.

Unprecedented First-Day Crowd

The doors of the exposition were forced open half an hour before the scheduled time by the largest crowd which had yet attended the first day of any of the expositions. Estimates of the crowd vary rather widely but all agree in placing the number well into the thousands. Large numbers of foreign visitors who were in the city for the meeting of the American Chemical Society last week stayed over for the exposition and were interested visitors at the various booths: Sir William Pope and the delegation of English and Canadian chemists which accompanied him were prominent as well as the delegation of some 150 from Latin America. Especially noticeable in the crowds was the large number of ladies attending.

The exhibits this year fully bear out the expectations of visitors in variety and good taste in composition. The booths do not show quite the great elaborateness of previous expositions and a rather decided inclination toward simplicity has shown itself. The effectiveness of the individual booths has not been sacrificed, however, by the omission of the heavy machinery exhibits of last year. The artistic exhibit of the largest of the chemical firms, the Allied Chemical and Dye Corp., is unquestionably the most striking in design, made up as it is by the exhibits of its constituent companies arranged in Egyptian style in a dozen or so booths in

the center of the immense hall. The other individual exhibits, four hundred in number, was each striking in

The arrangement of the entire exposition on a single floor called forth much favorable comment. The addresses arranged by the management have been well attended and the lecture hall in the basement of the armory was far superior to those which have been available for the purpose before.

Monday's programme included motion pictures of iron mining and the manufacture of abrasives at Niagara Falls, followed by the address of welcome by Dr. Herty, addresses by Senator Lenroot and General Fries. Tuesday afternoon the session was devoted to a symposium on crushing, grinding and pulverizing at which H. F. Kleinfeldt, of Abbe Engineering Co., S. B. Kanowitz, of Raymond Bros., L. H. Sturtevant, of the Sturtevant Mill Co., M. I. Dorfan and H. Schifflin, of the Allis-Chalmers Mfg. Co., and G. W. Repetti, of the Dorr Co., were heard. Following this the first of the "four-minute speakers," J. Merritt Matthews, introduced what was probably the most popular feature of the programme by his talk on the "Future Chemical America." H. Austin, of Ernest Scott & Co., on "Solvent Extraction of Edible Fats and Oils," R. H. McLain, of the General Electric Co., on handling materials, and W. H. Dickerson, of Industrial Waste Products Co., on utilizing waste products, illustrated by motion pictures, completed the afternoon programme.

Argues for Chemical Preparedness

The address of Representative Fred S. Purnell opened the evening session Tuesday. He argued for chemical preparedness as opposed to armament. An interesting programme of moving pictures was also shown Tuesday evening. By the courtesy of the Bureau of Mines, pictures of the transportation and storage of iron ore, asbestos from mine to finished products, and the dredging of anthracite coal were shown. The Economy Engineering Co. presented a picture illustrating the saving to be effected by improved methods of handling materials in industry. The mining of sulfur in Texas was shown by courtesy of the Texas Gulf Sulphur Co. The extraction of radium from carnotite attracted wide attention. The du Pont dye making operations formed the subject for an interesting film as well as the making of soap and the mine rescue methods of the Bureau of Mines.

Recovery of Waste Materials

The afternoon session in the Auditorium on Wednesday was given over to a series of talks on evaporation and drying. The leading speaker was E. G. Rippel of the Buffalo Foundry and Machine Co., who talked on the "Recovery of Some Waste Materials Made Possible by Vacuum Drying and Evaporating." H. S. Landell of Proctor & Schwartz gave an unusually effective talk on "Drying and Drying Problems." "Special Problems for Enameled Evaporators" was the topic discussed by Max Donauer of the Elyria Enameled Products Co., which was followed by A. E. Stacey, Jr., of the Carrier Engineering Corp. on "the Relation of Atmospheric Conditions to Chemical Processes." "Drying With Moist Air," was the subject discussed by Arthur B. Stonex of the Hunter Dry Kiln Co. A. W. Lissauer of the W. L. Fleischer & Co. spoke on "Drying as an Air Conditioning Problem." "Spray Drying" was discussed by W. H. Dickerson of the Industrial Waste Products Co. J. D. Stein represented the Grinnell Co. and gave his contribution to the symposium on "Atmospheric Drying by Means of Compartment, Tunnel and Continuous Belt Conveyor Dryers With Some Practical Applications."

Other speakers at this session included Robert V. Cook of the Chemical Equipment Co., on the "Criss-Cross Evaporator," J. S. Chen of the J. P. Devine Co., on "Vacuum as Applied to Industry," and H. Austin of Ernest Scott & Co., on "Evaporation." In the midst of the session, H. E. Howe, one of the four-minute speakers, gave a rousing talk on "Shall America Have an Independent Industry?" The evening meeting on Wednesday heard Thomas Walker Page, chairman of the U. S. Tariff Commission, on the "Chemical Industries and the Tariff." Mr. Page was followed by the series of moving pictures. The four-minute speaker Wednesday evening was Robert H. McKee on "The Marvels of Coal-Tar."

Paint and Varnish Day

Thursday has been set aside by the Exposition management as Paint and Varnish Day. Both sessions at the Auditorium on Thursday will be devoted exclusively to the consideration of paint and varnish problems, the afternoon symposium being opened by R. S. Perry, of Perry & Webster, Inc., on "Paint and Varnish Waste Control." H. A. Gardner of the Institute of Paint and Varnish Research will speak on "Reflection Factors on Industrial Paints."

Other speakers will include L. P. Nemzek of E. I. du Pont de Nemours & Co., on "Laboratory Control"; Maximillian Toch, of Toch Bros., on "Rust, its Cause and Prevention"; Frank G. Breyer of the New Jersey Zinc Co., on "Physical Testing of Paints and Paint Materials"; F. P. Ingalls, of John W. Masury & Co., on "The Ideal Paint and Varnish Specification"; D. A. Kohr, of Lowe Brothers Co., on "Limitations of Standardization of Paint and Varnish Manufacture."

Dr. Herty will be the four-minute speaker at this session, talking on the "American Chemical and Dye Industry." "Save the Surface" Committee, headed by its chairman, Ernest T. Trigg, will be heard in the evening. G. P. Heckel, Secretary of the Paint Manufacturers' Assn. of the U. S., will speak in the evening on "What Is Paint?" H. G. Byers will be the four-minute speaker on "War Patriotism To-day." Moving pictures on making white lead, varnish and paints will complete the evening show.

The annual banquet of the Chemical Salesmen's As-

sociation will be held Thursday night at 7 o'clock at the Show. The speakers will be Richard H. Lee, counsel for the Associated Advertising Clubs on "Does It Pay To Be Honest?" and Jack Jones, sales manager of the Alexander Hamilton Institute on "Man Power in Selling.'

The Ceramic Industry

On Friday at the Exposition, the chemical power plant and the ceramic industries will hold sway. A meeting of the American Ceramic Society will be held at 2 P.M. The speakers on the stone ware and clay working subjects will include: John G. Jones on "Business Conditions Relating to the Clay Working Industries"; P. C. Kingsbury, "The Importance of Chemical Stoneware in the Chemical Industries"; S. R. Scholes, "The Passing of King Methane"; Fred B. Jacobs on "Reducing Manufacturing Costs With Grinding Wheels"; F. H. Rhead, "Art Division Research Suggestions"; J. Spotts McDowell on "Refractories"; Charles F. Binns on "Porcelain for the Laboratory"; M. B. Greenough on "Heavy Clay Products Research."

The powder plant symposium will be opened by R. C. Beadle, editor of "Combustion." Other speakers will include, John Primrose of the Power Specialty Co., R. M. Gordon of the Solvay Process Co., D. S. Chamberlain of Distillation Industries, H. D. Savage of the Combustion Engineering Co., H. G. Barnhurst of the Fuller Engineering Co., and others. The evening motion pictures on Friday will combine coal and power films with ones on glassware, cement, and clay-working industries. The four-minute speakers will be Charles L. Parsons on the "Master Key Industry" in the afternoon and Charles Baskerville on "Dyes and Coal-Tar" in the evening

Dye and Color Symposium

Able speakers are scheduled for the dye and color symposium on Saturday afternoon. W. P. Cohoe, F. E. Breithut, Charles T. Baylis and Williams Haynes, representing the dye industry; and S. L. Rothapfel, manager of the Capitol Theatre, speaking on the "Psychology of Color in the Motion Picture Theatre."

Motion pictures on Saturday evening will tell the stories of newsprint paper, du Pont dyes, Alsatian potash salts, dynamite and the mining of magnetic iron

Exposition Notes

Judging from progress at some booths at the show early in the week, they will be ready to display their wares about next Sunday morning.

The burning question of the week on the Interborough Subway. "How do you get to Kingsbridge Road and Jerome Avenue?"

At the display of the Allied Chemical, little Egypt was complete except for one thing. The group of dancers in ancient Egyptian costume, which it was rumored about the trade would be present to perform in the ancient Egyptian way, did not show up. Reported lost in the subway. Nevertheless, a group of widely-known American chemists spent a suspiciously long time hanging around the Allied booth for several evenings.

The original pistons of Dowmetal which were in the car with which Tommy Milton, American auto racing driver, won the 500 mile International Speedway Classic at Indianapolis recently, were on exhibition at the Dowbooth

The samples of tapioca and dextrine at Stein-Hall's look mighty good, but the best looking thing in the exhibit, particularly to one who has walked some miles











M. C. Whitaker L. H. Baekeland Member Advisory Com. Chem. Member Advisory Com. Chem. Exposition Exposition

looking the show over, is their luxuriously cushioned chairs and settees.

"Colors Matched While You Wait." A two-act exhibition by Geigy with the use of a marionette show as follows: Enter customer with sample of color which he has been unable to match. Enter chemist from Geigy laboratory. Looks at color. Matches it in five minutes. Exit customer smiling. Finis.

Internal competition! Apples versus Nujol at the

Standard Oil booth.

How does the Reo Motor Co. expect to sell any of its delivery cars to the chemical industry just now? Suggest they try the Annual Bootleggers' Picnic, for the latter at least are doing a good business which is more than can be said of the chemical industry.

The idea of the whole chemical show on one floor was very pleasing not only to visitors but to exhibitors as well. The armory is certainly an improvement in itself over the four floors of the old Grand Central Palace.

After the Yale & Towne electric truck at the show had nearly run down a score of persons, the discovery was made that it was not an advertising scheme.

The complete process by which Orange II is derived from coal, salt and sulfur illustrated through each individual step, was the feature of the booth of Sandoz Chemical Co.

In spite of the fact that wooden clothes have been exhibited at the Exposition for several years "wooden overcoats" are still as unpopular as ever.

The Southern Railway is the only one on deck this year. What can the others be doing with the returns from the much discussed exorbitant freight charges?

Raymond F. Bacon sory Com. Chem. Member Advisory Com. Chem. Member Advisory Com. Chem. Dosition Exposition Exposition Exposition Chem. Chem. Exposition Exposition Exposition Exposition Exposition

The Army couldn't spend any more money so they put their trench mortars behind sacks of cement in the National Research Council's booth.

The glass-blower in the Corning Glass Co. booth was a grand drawing card as usual.

Fortunate idea to silence our friends with the drum head screens!

The brilliant idea of putting the speakers down in the basement where they could be the center of attraction should get its author a niche in the Hall of Fame.

Has National's chemist dyed for you? Zinc goes a long way according to the New Jersey

Zinc exhibit.

The "If" of the Charleston Industrial Corp. is not like Kipling's. It reminds us more of "System."

Desk space seems to have been popular. That's the way du Pont used theirs.

Maybe it was the Bronx that did it, but did you notice how many more ladies were present?

High freight rates have evidently kept the display of giant kettles and stills of the Buffalo Foundry away from the show this year.

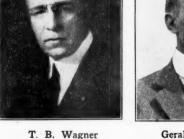
Foot-prints on the sands of time while you wait-Arthur Colton's pill machines do the trick.

A complete chemical plant from soup to nuts is featured by the National Research Council.

It is safe to say that the freight paid by the Canadian Department of the Interior to bring down several tons of its wonderful exhibit of ores and place same on exhibition, would pay the salaries of several chemists for a vear or so.

First prize for highly colored displays was a toss-up







Gerald Wendt Member Advisory Com. Chem. Chicago Section Amer. Chemical Engineer Elyria, O. Sales Manager Buffalo Foundry Exposition Society Photo by Steffens



Max Donauer



between Chemical Co. of America and Sherwin-Williams. Everybody appeared suspicious of Heyden's free root-

beer. Was it to advertise Heyden's saccharin or Hires' root-beer? You couldn't tell the difference!

Florasynth Laboratories handed out synthetic grape juice. Synthetic Scotch would be far more effective.

Far easier to find by use of the nose than by the eyes, was the booth of Antoine Chiris, the home of a thousand odors.

How surprising that the Baker Platinum Co. would trust so much of the precious metal around where there are "ten thousand chemists out of work."

Charts illustrative of the uses of alcohol commercially were distributed by the U. S. Industrial Alcohol.

Copper sulfate is just as good a means of decoration as it is an insecticide, judging from the Nichols Copper exhibit.

Strolling about with his hat cocked over one eye and a big cigar in his mouth, Dr. Milton Whittaker looked for all the world like a "Wyoming bad-man."

"Take this home and wash it." This was the caption on a folder containing a piece of green gingham dyed with Newport colors. By far, one of the most effective pieces of literature at the show.

The silk purse from the sow's ear was on the job at A. D. Little's, but strange to say it hasn't attracted half as much attention as it did in the newspapers.

In spite of the fact that the show was held a long way from Broadway, the management opened the doors a half hour before the official opening time owing to the large crowd waiting to get in.

The bottles at the Rhodia booth sparkled like a bride's collection of cut glass.

"Acid" is a term used by many people to designate almost any kind of chemical which has a corrosive action, and, in the same loose sense, the term "wood acid" is used in explanation of any unusual quality in a wood, such as taste, odor, or corrosion of metals in contact with the wood. As a matter of fact, in the research of the Forest Products Laboratory, only three chemicals correctly called acids have been found existing free in wood; these are tannic acid, acetic acid, and formic acid. Tannic acid is very feeble and has very little corrosive action on metals. The other two acids are also feeble in comparison with sulphuric, nitric, or hydrochloric acids.

Exports in August of this year were valued at \$275,000,000 as compared with \$578,182,691 in August of last year. The imports in August of this year, according to the Department's announcement, were valued at \$194,000,000 as compared with \$513,111,488 in August of last year The excess of exports in August of this year will be \$181,000,000 while the excess of exports in August of last year was \$65,071,203. For the eight months ending August of this year, the imports were valued at \$1,693,204,266 as compared with \$3,994,728,933, while the exports for the eight months ended August of this year were valued at \$3.230,087,224, as compared with \$5,475,303,593 for the same period ended August, 1920.

E. I. du Pont de Nemours & Co. have been awarded the contract by the Bureau of Supplies and Accounts, Navy Department, for furnishing 73,000 lbs. of concentrated sulfuric acid at \$1,170.34, bids for which were opened on Aug. 30.

The Treasury Department has announced the allowance of drawback on caffeine produced by the Monsanto Chemical Works of St. Louis, from imported tea waste, tea sweepings, tea dust, and tea fluff.

Rumor has it that four barrels of real "gen-you-wine" beer will be tapped at the Chemical Salesmen's banquet on Thursday evening.

GERMANY PROFITEERED ON MEDICINALS

The importance of synthetical coal-tar products in medicine was explained in a speech in Congress recently by Representative C. R. Layton of Delaware, a physician, who included in his address a list of coal-tan medicines prepared by The Barrett Company, New York, and a letter from George H. Whaley, president of John Campbell & Co., New York, in reply to the "monopoly" charge, and that large profits are being made by manufacturers. Representative Layton said in part:

"We are only beginning to comprehend the amazing possibilities for the preservation of human life found in coal tar and its products. It is impossible to conceive that an intelligent Congress can fail to recognize the relation which the development of synthetical chemistry bears to the health and happiness of the people in time of peace, and now its supreme necessity in time of war. There are few who realize the vast scope of usefulness and employment these products enjoy. We use them to save the infant's life, and we use them to embalm the dead. In some way, they enter into all employments hardly without exception. When the recent war in Europe broke out we were practically dependent upon foreign nations, especially Germany, not only for dyes and medicines but for all the rest of these synthetical products. Germany had so developed this varied industry as to furnish more than three times as much of these products to other nations as all the other nations put together. Through what is known as the intermediates, she practically monopolized this indus try. In view of this fact, it will be perhaps interesting to give the prices not of the dyes but of some of these medicines which we imported.

"Phenacetin, largely used during the influenza epidemic of 1890, was valued at our customhouses at a little under \$2 a pound. It was sold, however, to the retail druggist at \$16 a pound. What it cost the American consumer when it finally passed out of the druggist's hands needs neither imagination nor computation on the part of any Member of this House. It is now made by American manufacturers and sold in our markets at \$1.65 a pound. Antipyrin was sold at \$20 a pound. The American manufacturer now sells it at \$4.50 a pound. Aspirin cost us over \$10 a pound. American aspirin now brings \$1 a pound. Salvarsan cost \$3.50 a dose before the war. Six American concerns are now manufacturing the very best salvarsan, and it can be obtained for 36 cents a dose. These comparisons constitute a fair sample of how the American people are mulcted when they are at the mercy of a foreign manufacturer.

9,000 COCONUTS FOR A TON OF OIL

Coconut oil is produced from the fruit of Cocos Nucifera, a tree indigenous to the East Indies between 12° South and 15° North latitude, and Cocos Butyracea, indigenous to South America. Fruit is generally developed at the age of 8 to 10 years and from this time on it will produce 60 nuts a year for 50 years or more. The fruit when fully ripened contains some 30-40 per cent fat and 50 per cent moisture, but on account of the fact that it spoils rapidly the meat is dried to copra for transportation. Sun-dried copra is made by spreading the meat of the nut in the sun and contains 60 per cent fat and 8-10 per cent moisture. Fire drying is sometimes used but this generally imparts an empyreumatic odor and taste so that the preferred method is kiln drying in a stream of warm air. Copra prepared in this way contains up to 74 per cent fat and about 4 per cent moisture. It requires 9,000 coconuts to make one ton of oil.

Potent Influences in Chemical Progress

Views of Dr. Charles L. Parsons, Dr. W. A. Noyes, Dr. Harvey W. Wiley and Dr. David Wesson on the Work of the Chemist and Chemical Societies

The united front presented by chemists and the

stimulating influence of the chemical societies are

the potent influences which are building up the

chemical industry in the United States, says Dr.

Other factors in the successful development of the

industry, says Dr. W. A. Noyes, are the exclusion of

German chemicals, and the rapidly growing body of thoroughly trained chemists. Still further develop-

ment, Dr. Noyes says, will depend upon the training

of a body of young men in the methods of chemical

Dr. Harvey W. Wiley bases the progress made in

this country on sound commercialism. Dr. Wiley

draws attention to the advance in the chemistry of

nutrition and the strides made in medicinal chemistry.

try's industries is discussed by Dr. David Wesson,

president of the Institute of Chemical Engineers.

What the chemical engineer is doing for the coun-

Charles L. Parsons.

R. CHARLES L. PARSONS, Secretary, American Chemical Society:

"I think that one of the potent basic influences in the development of the chemical industry in the United States was the sudden realization in 1914 and 1915 of our dependency on foreign countries for various kinds of chemicals," said Dr. Charles L. Parsons, secretary of the American Chemical Society, to a represen-

tative of DRUG & CHEM-ICAL MARKETS. Dr. Parsons answered conclusively two questions during the course of his talk: First, what influences have been most potent in building up the chemical industry of the United States, and, Second, what has been done by the Association to stimulate the progressive movement. Dr. Parsons called particular attention to the fact that the American Chemical Society had a membership in 1914 of only 6,700, while at the present time the membership in that organization is well over 15,000, including almost every wellknown chemist in the United States. In other countries, Dr. Parsons said

no one chemical society has such a vast membership. Dr. Parsons said that the exchange situation at present greatly militates against American chemical manufacturers, as well as the high wages which must be paid by the chemical companies in the United States as compared with the very cheap wage which is paid to the workers in every other country, particularly Germany. Dr. Parsons pointed out the fact that during the world war the European nations realized the great use to which chemicals would be put, but before that was realized fully in the United States many men from the industry had been mustered into other branches of the service. Therefore, the whole munitions programme was retarded at first owing to a lack of technical men, chiefly chemists, and the statement was made everywhere that the greatest mistake that the Allies had made had been in giving too little attention to brain power and too much to physical strength. On the other hand, Dr. Parsons pointed out, Germany had carefully conserved her chemists for the new forms of warfare which she was forcing on mankind.

It was in view of the early mistakes which had been made by the Allies that the director of the Bureau of Mines and Dr. Parsons, representing the American Chemical Society, undertook to make a census of American cnemists for use in the war. The taking of this census was a great task, but the result was well worth the trouble. It is in such matters as this that the Society has been of so much help to the chemical industry.

Dr. Parsons feels that one of the most important economic results of the war has been the realization by the American public of the value of the chemical industry to the country as a whole. The American manufacturer had only begun to support chemical research or even chemical control before the war, said Dr. Parsons, and the American banker and investor had not become imbued with the necessity of really expert chemical ad-

vice in the new projects placed before them. In Germany there was a much better understanding of chemistry and chemists and to this fact alone may be attributed the better chemical preparedness of Germany for war. The greater and still increasing appreciation of chemistry by the leaders of America, and also by the people themselves, will prove to be of great economic importance.

While the war had the effect of increasing chemical productions, it also must be borne in mind, Dr. Parsons said, that the United States was deprived by the war of many kinds of chemicals which it had been obtaining sole.

it had been obtaining solely from Germany. This, of course, was true more
especially of dyes and potash. The effect was felt at
once of the German policy to stop the establishment in
the United States of any kind of a dye industry. Not
only were the dyes required for use in many of the
major industries but the chemists in this country were
deficient in the special organic chemical training that
accompanies and is necessary to the dye industry. Dr.
Parsons pointed out that the American Chemical Society has been very insistent in trying to get proper legislation through Congress, not only to protect the dyestuff industry but for the protection of the whole chemical industry.

Dr. Parsons pointed out the fact that the Government itself very materially helped the chemical industry to advance by leaps and bounds by the erection of its own huge chemical plants, for the production of chemical war material in various parts of the country, together with the plants for the fixation of nitrogen to produce nitric acid and ammonium nitrate and the many other chemicals which were produced for war purposes. The erection of these large plants and the work which was carried on in them naturally attracted wide public interest and this called to the attention of the American public the chemical industry.

I wish to reiterate the thought, said Dr. Parsons, that the greatest development of all which has come from chemistry during the war has been the realization by the American people that chemical research is necessary for the development of the country, and that no industry can bring greater prosperity to America than the chemical industry and that no body of men is more necessary to our welfare than a carefully trained corps of thoroughly educated chemists.

DR. W. A. NOYES, Chairman of American Chemical Society Committee on Co-operation Between the Industries and Universities

The exclusion of chemicals imported from Germany and other conditions during the war have led to a very rapid development of the chemical industries in America, especially in the direction of dyes, pharmaceutical chemicals, and, during the war, explosives. This rapid development was possible, chiefly because for a good many years before the war there was a rapidly growing body of thoroughly trained chemists. This was so true that in 1914 we stood second only to Germany in the number of chemists in any single country in the world, and the number in America very far exceeded the number of the chemists in either Great Britain or France.

The American Chemical Society has contributed very greatly to the advance of the subject of chemistry in America by the publication of its three journals, its Abstract Journal, in particular, giving now the most complete set of abstracts on chemical literature published in the world. The Society has also contributed by means of its local sections scattered all over the country which have done much to secure a common interest between industrial and university men. The two annual meetings of the Society have also contributed to the same end.

The list of chemists who deserve credit for research work in America is very long. I might name particularly T. W. Richards, E. H. Kohler, R. H. Chittenden, L. B. Mendel, B. B. Boltwood, A. A. Noyes, W. R. Whitney, P. A. Levene, Alexander Smith, M. L. Bogert, E. F. Smith, Moses Gomberg, Julius Stieglitz, G. N. Lewis, S. W. Parr, W. D. Harkins, E. C. Franklin, C. E. K. Mees, F. G. Cottrell, A. D. Little, John Johnston, A. L. Day, and R. C. Tolman. The list might be almost indefinitely extended, but I consider those named among the most prominent.

The manufacture of dyes in America has been developed to such an extent as to make us independent of dyes from foreign sources, provided the industry is protected until it is thoroughly on its feet. Considerable work has been done toward the manufacture of potash from Searles Lake, and some other sources. The manufacture of fine organic chemicals for research purposes, which was developed during the war at the University of Illinois, is still continued there and at the Eastman-Kodak Company in Rochester, New York. The Bureau of Chemistry has developed new methods for the manufacture of phthalic acid and anthraquinone. A good beginning toward the synthesis of the compounds of nitrogen from the nitrogen of the air has been made in the investigations of the Nitrogen Research Laboratory in Washington.

In conclusion I wish to say that it is the opinion of our Committee that the fundamental basis upon which further successful development of chemical industry in the United States must rest is the thorough training of a body of young men in the methods of chemical research in the universities and technical schools of the country.

DR. HARVEY W. WILEY, Formerly Chief, U. S. Bureau of Chemistry:

The principal factor in the development of chemical industry in the United States is sound commercialism.

People engage in the manufacture of chemicals, not because they love chemistry, but because they want to make an honest living. A proper return on the investment is a perfectly justifiable condition of the industry, without which it could no longer exist and, of course, could not further advance. At the same time chemical manufacturers should, by practicing economy and limiting profit to that which is just, keep the price of chemical products as low as possible to the consuming public.

The principal chemical association to which I belong is The American Chemical Society. I am also a member of the Association of Official Agricultural Chemists. The American Chemical Society is the protagonist of all legitimate chemical industries. The Association of Official Agricultural Chemists has done a wonderful amount of good in standardizing the agricultural chemical industries. The two associations together are practically the Maecenas of modern chemistry in America.

"I could not within a reasonable limit, name the individual chemists in America who deserve credit in this direction. Their name is legion. Many of them are humble workers without any international reputa-





Chas. L. Parsons W. A. Noyes
Secretary Amer, Chem. Society University of Illinois, Past Pres
Copyright, Harris & Ewing Amer. Chem. Society

tion; some of them have gained world-wide fame; some have been very successful financially; others are working at meager salaries. All deserve recognition irrespective of the eminence to which they have risen.

The advance in the chemistry of nutrition is notable. In the last 25 years the chemistry of nutrition has become revolutionized. Prior to that time the science of nutrition was more or less empirical. At the present time it is very rigidly scientific. The outstanding facts of this progress are found in the discovery and identification of amino-acids, the building stones of the body. Coupled with this has been the discovery and partial identification of the properties of the so-called vitamines. Absolutely pure foods, that is, pure sugar, pure starch, pure protein, pure fat and pure mineral substances are incapable of nourishing the body. There must be present the vital spark, that is the vitamine. If I might compare the human body to a motor car I would say, that the food represents the gasolene and the vitamine the spark. It requires the two to drive a car, so it requires food and vitamines to drive the human or other animal organism. I have no time nor space to enumerate the hundreds of workers who have been active in developing this modern theory of nutrition. It appears to me, if I may add a word, that you should include reports on the science of chemistry in

medicine. The progress along this line has been enormously great and the end is not yet.

DR. DAVID WESSON, President American Institute of Chemical Engineers:

Painted on the wall of the library of the National Engineering Societies' building in New York, is the following definition: "Engineering—the art of organizing and directing men and controlling the forces, and materials of nature for the benefit of the human race."

This definition is a very broad one and seems particularly adapted to defining the activities of the Chemical Engineers. It is a definition which arouses pride in our profession for it indicates that the object of our profession is service, service for the benefit of our follow beings.

A glance through the list of members of our Institute will show that they are engaged in producing thousands of products which go to improve living conditions, and at the same time provide means of earning a livelihood for multitudes. As an example, take the cotton-seed oil industry alone. I mention it because it is the one with which I am most familiar. It gives employment in this country, to 20,000 factory hands and 5,-





Harvey W. Wiley

Formerly Chief, U. S. Bureau of Pres. Amer. Inst. Chem. Engineers

Chemistry

Photo by Gessford

000 officers and salaried, men, and all based on chemical engineering in developing the oil of a once despised waste product into valuable human food.

Similar results are happening daily in other industries where the chemical engineer has had the opportunity to apply his knowledge. We see them in the field of metallurgy, fuel, mineral oils, tar, coloring matters and dyes, fiber products and paper, alkali acids and salts, glass and ceramics, building materials, paints, varnishes, india rubber, leather, glue, fertilizers, sugars and starches, foods, and all sorts of organic products, photographic materials and explosives.

A subject of great importance is the education of the future chemical engineers of the country. The great war has shown that the first line of defense in future wars is to be engineering chemistry which will wield infinitely more deadly weapons than the big guns of our battleships. Incidentally, were it not for the chemical engineer furnishing explosives, the big guns would be useless.

Our Committee on Chemical Engineering Education is now being furnished by its able and painstaking chairman with a thorough survey of the educational facilities and requirements of all the large institutions of our country which are teaching the subject. The carefully tabulated results will be furnished to all the members of the Institute, and to the colleges. Dr. Little has given us the diagnosis. It is up to us to prescribe the remedy.

DYE LICENSES GRANTED IN AUGUST

Licenses for the importation of foreign dyes and chemicals, issued during August by the Treasury Department, Division of Customs, Dye and Chemical Section, included 79,729.9 pounds of dyes from Germany, 34,210 pounds from England and 130,397.6 pounds from Switzerland. The list follows:

Sch. Designation of Dye No. Acid Brown R N. Acid Cyanine B F 293 Acid Milling Red G. Acid Rhodamine 3 R 569 Acridine Red 3 B 244 Algol Blue 3 G Paste. 844 Algol Blue 3 G Paste. 844 Algol Brilliant Orange F R 822 Algol Brilliant Orange FR Pdr. 819 Algol Brilliant Red 2 B 819 Algol Brilliant Red 2 B 819 Algol Brilliant Red 2B Pdr. 870 Algol Corinth R Powder. 824 Algol Brilliant Red 2B Pdr. 870 Algol Corinth R Powder. 884 Algol Pink R Pdr. Algol Red 5G 875 Algol Crange R Pdr. 876 Algol Red 5G 876 Aliz. Blue Black B 877 Aliz. Blue Black B 878 Aliz. Blue Black B 879 Aliz. Blue Black B 870 Aliz. Blue Black B 870 Aliz. Blue Black B 870 Aliz. Blue SKY 870 Aliz. Blue SKY 870 Aliz. Green C G Ex 871 Aliz. Madder Lake 872 Aliz. Madder Lake 873 Aliz. Red S 874 Aliz. Red S 875 Aliz. Red S 8	Germany (pounds)	England (pounds)	Switz.
Acid Brown R N	500		500
293 Acid Milling Red G	500		1,500
569 Acridine Red 3 R	29.3		2,200
244 Algol Blue 3 G Paste	672		
822 Algol Brilliant Orange E P	200		
822 Algol Brilliant Orange FR Pdr	33		
819 Algol Brilliant Red 2 B	75		
870 Algol Corinth R Powder	100		
818 Algol Pink R Pdr	150		
Algol Red 5G	112		
774 Aliz, Black S R Paste	100 5 bbls.)		
862 Aliz. Blue Black	500		1
862 ANZ. Blue Black 3 B	400		
Aliz. Blue Black B T Pdr	(1 bbl.)		
Aliz. Blue S. A. E	2,200		
799 Aliz. Cyanine GG Pdr	1,100		11
865 Aliz. Cyanine Green G Ex	200		
803 Aliz. Green C G Ex	1,120	500	
893 Aliz. Indigo G	4,000		
Aliz. Red S	100	700	
780 Aliz. Red S. Powder	100		
780 Aliz. Red S W B Pdr	1 bbl.)		
780 Aliz. Red -W Pdr	1,500		
Aliz. Rubinole 5 G	200		
Aliz. Rublnole R	2,200		
855 Aliz. Sky Blue B. Pdr	50		
784 Aliz. S. X. 20% Paste	1,300		
789 Anthracene Blue R Paste	50		
780 Aliz. Red S. Powder	1,000		
864 Anthraquinone Green GXNO Pdr.	100		
853 Anthraquinone Violet Pdr	100 500		
Benze Brilliant Violet B	100		
Benzo Brilliant Violet 2 R	225		
Benzo Red 12 B	70		
Brilliant Bronze Lake B	350		
Brilliant Bronze Red B	6 000		
Brilliant Lake BB	750		
Bromofluorescie Acid Crystals Index	500		
Bronze Blue for Laundry	25		
Chloramine Red 8 B Conc	2/		500
Chlorantine Brown R. L			110
Chlorantine Fast Blue 2GL			110 4,950
Chlorantine Fast Blue RL			200 880
Chlorantine Fast Brown 3GL			960
Chlorantine Fast Brown RL Chlorantine Fast Brown RL Chlorantine Fast Brown SGL Chlorantine Fast Grey BL Chlorantine Fast Light Blue 2GL Chlorantine Fast Red 7BL Chlorantine Fast Red 7BL			960 1,100
Chlorantine Fast Grey BL			1,100 1,100
Chlorantine Fast Red 7BL			6,765
Chlorantine Fast Violet BL			1.100
Chlorantine Fast Violet 4BL			1,205
Chlorantine Fast Red 7BL Chlorantine Fast Violet BL Chlorantine Fast Violet 4BL Chlorantine Fast Violet 2RL Chlorantine Fast Vellow 4GL Chlorantine Fast Yellow RL Ciba Blue BB SI Ciba Blue BB Powder SI Ciba Blue 2BD			1,980 330
Ciba Blue BB			6.710
81 Ciba Blue BB Powder			16,940
88 Ciba Blue 2BD Paste Pat			16,940 3,800 2,200
99 Ciba Grey B Pdr. Pat 99 Ciba Grey G Pdr. Pat			110 110
07 Ciba Scarlet G Paste			1,100
07 Ciba Scarlet G Pat. 20% Paste			1,100 2,200 770
Ciba Violet B Paste			3,300
01 Ciba Violet B Pdr			330 220
01 Ciba Violet B Pdr. Pat			1,265 2,310
Cibanone Green G Paste			1,100
99 Ciba Grey G Pdr. Pat. 07 Ciba Scarlet G Paste 07 Ciba Scarlet G Pat. 20% Paste 07 Ciba Scarlet G Ex. Pdr Ciba Violet B Paste 01 Ciba Violet B Pdr. Cibanone Green B Paste Cibanone Green G Paste Cross Dye Green 2G Conc	10,	,000	

Sch. Designation of Dye		England (pounds)	Swit
Cupranile Brown R. Cupranile Brown R Conc. 546 Cyanole F F. Diamine Catechine B. Diamine Catechine GR Conc. Diamine Fast Blue FFB Diamine Fast Rose G. 274 Diaminogene			220 1,980
Diamine Catechine B	100 500		
Diamine Catechine B. Diamine Fast Blue FFB Diamine Fast Rose G 274 Diaminogene 273 Diaminogene Blue NA 274 Diaminogene Blue NA 275 Diamond Red G Pdr 279 Dianol Fast Red K Diazo Brilliant Scarlet S4B Diazo Brilliant Scarlet S4B Diazo Brilliant Scarlet S4B Direct Catechine GR Direct Grey R Paste Direct Safranine RW Direct Sky Blue Shade Cone 881 Durindone Blue 4R S51 Erio Azurol B X S51 Erio Azurol B X S53 Erio Chrome Azurol B X S53 Erio Chrome Black T S54 Erio Green BB Supra 636 Euchrysine 3RX Fast Felt Blue Extra 523 Fast Green Bluish Gallophenine W S60 Gallophenine W S60 Helindone Brown G S61 Helindone Brown G S62 Helindone Brown G S63 Helindone Pink AN S64 Helindone Pink AN S66 Helindone Pink AN S67 Helindone Pink BN S68 Helindone Pink BN S69 Helindone Pink BN S60 Helindone Pink BN S60 Helindone Pink BN S61 Helindone Pink BN S63 Helindone Pink BN S64 Helindone Pink BN S65 Hydron Brown OB S65 Hydron Brown OB S66 Hydron Brown OB S67 Hydron Vellow G S67 Paste S67 Indanthrene Golden Orange RRT S68 Indanthrene Golden Orange RRT S68 Indanthrene Grey E Paste Lindanthrene Grey E Paste	500 7		2,200
274 Diaminogene Blue NA	200 3,000		
273 Diaminogene Blue NB	1 0 0 500		
279 Dianol Fast Red K	150	500	
690 Diphene Blue RK	20 500		
Direct Catechine GR			110 500
Direct Sarranine RW Direct Sky Blue Shade Conc			110
551 Erio Azurol B X		2,000	500
183 Erio Chrome Black T			5,500 6,000
Erio Dark Blue RC Erio Green BB Supra			1,000 1,000 7,000
603 Euchrysine 3RX Fast Felt Blue Extra	290 500		7,000
523 Fast Green Bluish 523 Fast Green Extra Bluish	200 5,000		
Gallophenine P	110 400		
880 Helindone Blue 2B	10 100 100		
904 Helindone Brown G Pdr	94 50		
910 Helindone Pink AN 910 Helindone Pink AN Paste	1,000 1,487		
910 Helindone Pink AN 10% Paste 910 Helindone Pink BN	1,000 1,100		
910 Helindone Pink BN Paste 907 Helindone Scarlet C	2,200 100		
810 Helindone Vellow 3 GN	100 100		
809 Homophosphine G.	100 29.3	-	
Hydron Olive G Pdr	500 20 500		
Hydron Yellow G 20% Paste 840 Indanthrene Biue 3G Pdr	500		
827 Indanthrene Claret B. Ex	100 1,275		
Indanthrene Golden Orange G Pdr. 761 Indanthrene Gold Orange R	150 · 150		
761 Indanthrene Golden Orange RRT 761 Indan. Golden Orange RRT Paste.	1,000 250		
761 Indan. Golden Orange RRT Pdr	150		
761 Indan. Golden Orange RRT Pdr	475 150		
831 Indan. Red BN. Ex. Paste	1,157 bls.)		
819 Indan. Red Violet 2RB Pdr	150 325		
819 Indan. Red Violet 2RB Pdr. Indan. Reo Violet RRN. Indan. Violet BN Extra. 768 Indan. Violet BN Ex. Paste. Indan. Violet BN Ex. Pdr. 767 Indan. Violet BN Ex. Pdr. 768 Indan. Violet RR Ex. Paste. Indigene Blue R W. 883 Indigo MLB 6 B. Ink Blue BITBNOO Kiton Fast Yellow 3G. Kiton Fast Yellow 3G. Kiton Fast Yellow 3G. Kiton Fast Yellow 3G. Lanasol Green G. Lanasol Green G.	900 400		
Indan. Violet BN Ex. Pdr	25 1,600		
883 Indigo MLB 6 B	200		220
Kiton Fast Yellow 3G.	1,100		1,940
Kiton Fast Yellow SG Conc			220 990
			2,210 550 2,775
Lanasol Red U. Lanasol Red U. Lanasol Yellow G 606 Leather Phosphine PGG Lichtecht Rot No. 1 Ex. Paste. Lithol Fast Orange R Pdr. 660 Methylene Green B X 660 Methylene Green W Millier Value			2,800 500
Lithecht Rot No. 1 Ex. Paste Lithol Fast Orange R Pdr	110 500		500
660 Methylene Green B X	10		3,000
Mounsey Olive Brown G Pdr. (same	2,000		
660 Methylene Green W Milling Yellow O Mounsey Olive Brown G Pdr. (same as Chrome Fast Olive B Pdr.) 338 Napthamine Pive 3R Napthamine Fast Green B. Nerol 2R	250 200	b1.)	
Nerol 2B	200 500 50		
New Ethyl Blue B S	100		
560 Night Blue	100 20		
653 Nile Blue B X. Old Gold Acid Aniline Olizarim Trisol R	29,3	500	
543 Patent Blue V	200 500		
Patent Carmine Blue A	25		110
Peacock Blue	250 110		330
radsparine (Contonavine (1)	110		

Sch. Designation of Dye No.	Germany (pounds)	England (pounds)	Switz,
606 Phosphine M. Conc		()/	2,200
539 Pure Blue Conc	25		4,200
360 Pyramine Orange R	30		
Pyrazol Orange G	-		2,000
Pyrogene Brown DTB			220
726 Pyrogene Direct Blue RL			1,200
726 Pyrogene Direct Blue RL Conc			2,200
709 Pyrogene Green 3G			50.6
735 Pyrogene Indigo			440
Pyrogene Orange R			110
Pyrogene Yellow Brown RS			220
734 Pyrogene Yellow O			1,100
618A Rhoduline Yellow 6G	100		
Rosanthrene Bordeaux B			330
Rosanthrene R			484
Soluble Blue I N	1,000		
Sulphur Catechine R	200		
618 Thioflavine T	1,500		
Thiogene Orange R	75		
910 Thio Indigo Rose B N Paste	500		
661 Thionine Blue G O	200	* ***	
Thionol Green D Y		1,500	
Thionol Yellow 3RD		18,500	
	1,000	10	
457 Trisolphon Brown 20	1,000		2.000
457 Trifulfon Brown GG or 2G			2,000
Typophor Black	5		2,000
Ursol Grey A L	200		
Ursol Grey B	100		
Ursol S L A	100		
Viridine Green	200		
Wool Black G R	500		,
Wool Black GRF	2,250		
Wool Fast Blue BL	200		
Xylene Fast Green B			200
22 Xylene Fast Light Yellow 2G			570
Xylene Fast Yellow 2G			1,000
22 Xylene Light Yellow GG			500
22 Xylene Light Yellow 2G			2,175
Yellow Developer C			4
250 Zambezi Scarlet 6B Extra	250		
Total	79,729.9	34,210	130,397.6

REPARATION DYES IN COMPETITION

A protest against the British Board of Trade's competition with private dyestuff merchants in the distribution and sale of reparation dyestuffs has been addressed to the President of the Board of Trade by the Chemical and Dyestuffs Traders Association of England. In their letter, the association points out that up to June 30, last, of over 4,000 tons of reparation dyestuffs imported direct by the Board of Trade, only a little over 1,000 tons has been sold; that where sales on behalf of the Board take place, "they appear to be effected through what is known as the Central Importing Agency, which consists of a Manchester firm having no previous experience in the industry, and which is in the habit of offering, by circular or otherwise, goods for sale to members of the trade"; that the licensing committee of the Board of Trade refuses to grant import licenses to merchants for colors included in the Board's unsold stocks, and directs applicants to apply to the Central Importing Agency for their supplies; and that the licensing committee's policy of demanding from applicants for licenses the names of their customers "enables the Board of Trade as importers and distributors of dyestuffs to collect information as to the customers usually supplied by merchants, and to approach such customers direct through the Central Importing Agency.

In reply the president of the British Board of Trade says the Board is carrying out its statutory duties and sees no reason for changing its policy.

The Dye Division of the American Chemical Society, in a letter signed by R. Norris Shreve, urges members to address letters to representatives in Congress requesting that the dye licensing system be included in the tariff bill. Included in the letter is a folder containing an appeal for protective legislation by Francis P. Garvan, formerly Alien Property Custodian and president of the Chemical Foundation, Inc.

21

Chemists Discuss Vital Questions

Sir William Pope Addresses American Society on Chemical Warfare-A. D. Little and Francis P. Garvan Speak on Topics of Great Interest to Manutacturers



Chas. F. Chandler



Sir Wm. Pope, D.Sc., F.R.S.



J. P. Longstaff



Edgar F. Smith Past Pres. Amer. Chem. Society Past Pres. Society Chem. Industry General Secretary, Society Chem. Pres. Amer. Chemical Society Photo by Brunel

66 THE present German government differs in no important particular so far as the world outside of Germany is concerned from the government of the Hohenzollerns," was the opinion expressed by Francis P. Garvan, president of the Chemical Foundation, in his address on "Chemistry and the State" before the general meeting of the American Chemical Society at Columbia University on Wednesday of last week. Outlining the activities of Dr. Hugo Schweitzer in service

to his state as a scientific spy in this country before the war, he held up these attributes as a profane application of his profession and urged the members of the society to a high idealism in service to their states, for "Science is the soul of the prosperity of nations and the living source of all progress-what really lead us forward are a few scientific discoveries and their application."

Following Mr. Garvan, was the address of Sir William Pope, retiring president of the Society of Chemical Industry, and chief of Great Britain's scientists in gas warfare, who called attenton to the fact that less than two per cent of the casualties in the war resulting from the use of gas failed of complete recovery. The objection to gas warfare, he continued, hinged entirely upon its novelty and the breaking of the covenant of nations not to use such means in warfare.

The deliberations of the council of the society resulted in the passage of a resolution urging careful consideration of the chemical phase of warfare upon the coming conference on disarmament and protection to the American organic chemical industry by Congress. This resolution was presented to the society at the meeting Wednesday.

The wasteful expenditure of energy and the necessity

It is a pleasure to extend greetings to the gathering of American, Canadian and British societies representing chemical science and industry meeting on American soil. Probably none of the materialistic sciences holds promise of so great contributions to human welfare in coming generations as that which your organization represents. The developments of applied chemistry involve both a possibility of vastly increased horrors in human conflict and an ultimately inestimable benefit to a peaceful civilization. Let us hope that a science so fraught with either good or vicious possibilities may be turned through the wisdom of nations to the benefit and advancement of mankind.

> (Signed) WARREN G. HARDING.

of searching for new sources was the central theme of the address by Dr. Arthur D. Little at the International meeting of the American and British societies held Thursday afternoon in the great hall of the College of the City of New York. The possibility of harnessing the sun, the wind and the sea to do useful work was carefully considered by Dr. Little and the wasteful methods by which our reserves of crude petroleum are being dissipated were discussed at length. Vast stores of energy from na-

tural sources, which it has been impossible to utilize at the present day will furnish the motive power of future generations, he continued, and the immense undeveloped water power resources will reach full usefulness, perhaps within our own generation.

Sir William Pope addressed this meeting, pointing to the gathered scientists the probable future trend of scientific endeavor. Just as in the past chemical reactions have come to be carried on by the application of energy at less and less potential difference, so in the future will science tend toward the application of energy at low potential such as is used in vital processes where even slight potential differences result in death.

Other able addresses at this meeting were delivered by Dr. Chas. Baskerville, Dr. Leo Baekeland, Dr. Willis R. Whitney, Dr. C. E. K. Mees, Professor Ernst Cohen of the University of Utrecht, Holland, and Professor Wilder D. Bancroft, dealing with the general application of new discoveries in chemistry and the probable future trend of industry.

The presidential address, outlining the progress of scientific chemistry during the year, was delivered by Dr. Edgar F. Smith at the final meeting held Friday evening at Columbia University. President Smith touched upon the progress of applied science in the dye industry and the development of theoretical chemistry in our colleges.

The divisional meetings of the society on Wednesday, Thursday and Friday were well attended and a wide variety of papers presented touching on all phases of the work of chemists during the past year.

Aside from the serious objects of the meeting, the opportunity for the New York Section to spread itself as to entertainment and the furtherings of international good fellowship was not neglected. The tea-dance at Dr. Chandler's to which he characteristically invited "all you boys to meet the old professor" was held Thursday afternoon and rumor has it that this was the only party at which the foreign guests were not reminded that





Gaston DuBois

Author of Paper on "Special Cost Chairman Executive Com. for Features in the Organic Chemical Industry"

Photo by Gessford

they were in the dry U. S. A. A garden party was held on the Columbia campus on Wednesday afternoon at which tea was poured in honor of the English guests. The smoker on Wednesday evening at the Waldorf-Astoria was the grand event of the entertainment. "Pop" Henrick's troupe of comical chemical actors received an ovation in presenting their farce, "What Is A Chemist?" Suffice it to say that even the mind reader of the evening could or would not try to answer the question they propounded. The songs composed to popular airs referring to various prominent members of the Society received well-deserved applause. "Churchie, the Moonshiner," "Carleton Ellis, the demon patentee;" "Nujol," and "Uncle John, the kelly pool wizard' were duly sung among the selections.

The banquet at the Waldorf on Thursday evening was attended by some 300 members and ladies. Brigadier-General Amos A. Fries, of the Chemical Warfare Service, was the principal speaker of the evening. He briefly outlined the hopes and fears of the chemical warfare service and urged the continued co-operation of the society in the work of the army. Gen. Fries also briefly outlined the type of chemist he hoped the colleges would be able to send him for his work, a man who is a good chemist but who must possess all the human attributes of a "good mixer."

Entertainment for the ladies was not neglected and included parties at the Chandlers' and the home of Mrs. Elon H. Hooker at Greenwich, Conn., sight-seeing trips, theatre parties and visits to various points of special interest.

Excursions to plants in the vicinity of New York were made Saturday, Sunday, Monday, Tuesday, and Wednesday, while a majority of the members present are staying over to attend the Chemical Exposition

There were present at the meeting some 1,600 visitors from outside of New York exclusive of the New York Section which comprises some 2,500 members.

DR. NICHOLS ANNOUNCES SUCCESSFUL MAKING OF NITROGEN PRODUCTS HERE

Process of Fixation of Atmospheric Nitrogen Expected to Make United States Independent of Chilean Sources of Nitrate—Efforts of Other Companies to Solve the Problem

Dr. Wm. H. Nichols, chairman of the board of the Allied Chemical & Dye Corporation, officially announced recently that his company is now turning out on a commercial scale nitrogen products made by the fixation of atmospheric nitrogen. Dr. Nichols made the facts public at the luncheon tendered the foreign visitors to the American Chemical Society meeting on Wednesday of last week. This was the first official announcement of the perfecting of these processes by the corporation.

Offers of nitrite of soda through the Semet-Solvay Co., one of the member firms of the corporation, have been made for some months and it is believed that the taking up of this process by the largest of the chemical manufacturing firms will ultimately result in complete independence of the United States from the natural nitrate beds of Chile which have been the principal dependence of the world for combined nitrogen.

Previous to this the American Nitrogen Products Comanufactured nitrite of soda from the air in this country near the Pacific Coast, using a process similar to that employed by the Allied Chemical and Dye. The plants of the Norwegian hydroelectric companies have been using this type of process for some years in the manufacture of lime and other nitrates. In this country before the war the American Cyanamide Co., with plants located on the Canadian side of Niagara Falls and using the cyanamide process, was the only company making





H. C. Parmelee

Member Co-Ordinating Com. for Joint Meeting
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Goo. D. Rosengarten
Director & Councilor-at-Large
Amer. Chem. Society

at Great Falls, S. C., to make nitric acid direct from the air. The development at Muscle Shoals, Ala., by the government as well as the unsuccessful attempt at Saltville, Va., were attempts to solve the problem in various manners and by various processes.

The United States will be able to use a 2-cent postal rate to all South and Central American countries under the provisions of an article approved this week at a plenary session of the Pan-American Postal Congress at Buenos Aires, Argentina. This article establishes as a fundamental principle the liberty of each country to fix its foreign postal rates, provided such rates are kept within a maximum equivalent to 5 cents in American gold. O. K. Davis, secretary of the Foreign Trade Council, New York, was the United States delegate.



Chairman. Montreal Section, So-H. W. Matheson ciety Chem. Industry



F. W. Atack
Editor *Chemists' Year Book";
Member British Delegation



F. W. Gamble Chemist; Member British Delegation



J. E. Zanetti

Member Co-Ordinating Committee
of Joint Meeting
Photo by Campbell

Business Brevities

The Atlantic Chemical Works, Ltd., has obtained a judgment for \$173.70 against Edwin G. Hatch.

The Procter & Gamble Distributing Co. has obtained a judgment for \$164.63 against the Greeley Products Corporation.

The Merrimac Chemical Co. has declared a quarterly dividend of \$1.25 per share, payable Sept. 30 to stock of record Sept. 17.

The Missouri-Kansas Chemical Corporation, St. Louis, has leased the building used by the Whitman Agricultural Co. and has made extensive improvements.

The Armour Fertilizer Co., 209 West Jackson Boulevard. Chicago, Ill., is planning to rebuild its fertilizer works at Columbus, Ga., destroyed by fire, August 9, with loss estimated at \$300,000.

Lithopone marketed during 1919 amounted to 78,365 short tons, valued at \$10,218,850 and during 1920 to 89,373 tons valued at \$12,484,925. The increase amounted to 14 per cent and the increased value per ton to 7.1 per cent.

A survey is being made of the phosphate deposits of Arkansas under the direction of Commissioner of Mines, Manufactures and Agriculture of Arkansas. Concentration of low grade rock is expected to make large bodies of ore available.

According to investigation made by the Bank of Japan, eight new chemical companies were established during June with a total capital of 3,050,000 yen. The establishment of new companies for the first six months of the year reached 64.

E. I. du Pont de Nemours & Co. announce two new products ready for the market—Ponsol Blue G D Paste and Ponsol Violet Red Paste. These brands are suitable for printing and for dyeing cotton, yarn, etc. and are fast to light and washing, and chlorine.

Charles B. Chrystal announces the incorporation of the Charles C. Chrystal Co., Inc., to carry on the business of importing and grinding minerals, clays and colors. The company's offices are at No. 11 Cliff street, New York, with a warehouse in Jersey City.

Three men were arrested in New York this week

on a charge of having narcotics in their possession and were held in bail of \$50,000 each in Special Sessions. The narcotics were valued at \$20,000. Dr. Carleton Simon said the arrests were the most important made by the Narcotic Division since its organization.

The United Dyewood Company declared the usual quarterly dividend of 1½ per cent on the common stock, which together with the regular quarterly payment of 1¾ per cent on the preferred stock declared some time ago, will be paid on October 1, the common to stock of record September 19 and the preferred to holders of record September 15.

J. Spaulding & Sons Co., Wheeler Street, Tonawanda, N. Y., manufacturer of fiber products, has construction under way on its new plant addition, consisting of a number of buildings, estimated to cost \$125,000. The company will increase its present working force from 175 to about 400 operatives as soon as the extensions are ready for service.

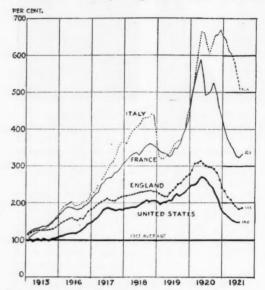
The Geological Survey has issued a warning to protect the public from misrepresentation and fraud by unscrupulous promoters and sellers of stock based on potash deposits in Western Texas. The survey states that the potash deposits there, instead of being 300 or 1,100 ft, thick as represented by the promoters, have not yet proved to be of workable thickness or of commercial value.

The action of Continental Can following the announcement of the passing of the dividend gave a clear illustration of what pools or cliques can do with a stock which is closely held, and in which there is believed to be a short interest. Following the dividend announcement the stock broke from 40 to 38, but within a few minutes it rose to 44½, an extreme gain of 6½ points in spite of the unfavorable news.

The London tin market declined £2 15s for both standard and spot Straits, making a total decline of £5 15s within two days. Quotations for standard were: Spot, £156 5s; futures, £158 15s. Sales comprised 30 tons spot and 370 tons futures. Straits was quoted at £156 15s for spot. The market was reported weak. The Eastern shipment price was down £3 at £161 5s c.i.f. London on sales of 300 tons. The Metal Exchange lowered its settling price .35c to .75c for Straits deliveries and quoted 26.25c for spot and September, against 26.05c asked. October was quoted at 26.37½c bid, 26.50c asked; November at 26.50c against 26.37½c bid, 26.62½c asked.

U. S. WHOLESALE PRICES LOWEST

Wholesale price averages for principal countries moved upward or were at a standstill during July, says the "Monthly Review" issued by the Second Federal Reserve District. As long ago as March some slackening in the price decline throughout the world began to be noticeable. In May the general rate of decline was



Wholesale Commodity Prices in Four Countries (Average Prices in 1913 = 100 per Cent.)

again less rapid and the indices of basic commodities maintained by this bank for the United States and for England showed slight increases. The diagram shows wholesale commodity prices in four countries—Italy, France, England and the United States from 1915 to 1921, compared with average prices in 1913.

Sale of the Ohio and Colorado smelter at Salida, Colo., by the Morse Brothers Machinery and Supply Company, Denver, to the owners of the Raleigh mine in the Salida district for a consideration in the neighborhood of \$400,000, was recently announced. The Raleigh mine is owned by Parke, Davis & Co. The property, it is understood, will be used to smelt ores for the production of lead, zinc, arsenic and other byproducts of the mineral produced in the mine. The production will be used mainly in drug supplies. The plant was purchased two years ago from the American Metal Company for \$155,000.

For the quarter ended June 30, 1921, International Cement Corporation shows net income, after charges and taxes of \$348,168, equivalent to \$1.29 a share earned on the 268,429 shares of capital stock of no par value. This compares with net income of \$499,656, or \$1.86 a share, in the preceding quarter, and \$547,591, or \$2.09 a share, earned on the 262,014 shares of capital stock, in the June, 1920, quarter. Net income for the six months ended with June totaled \$847,874, or \$3.15 a share.

Receivers of the Industrial Chemical Co., East Providence, R. I., will sell the property which consists of real estate, machinery, equipment, surplus made-up products and a stock of raw materials on September 15. The sale will be held at the plant on Massasoit avenue, East Providence, at 12 o'clock noon, daylight saving time. The plant is fully equipped for the manufacture of direct and azo colors.

QUOTATIONS ON CHEMICAL STOCKS

Bid	Asked	· Bid	Asked
Aetna Expl 10	101/2	Heyden Chem 11/2	134
Aetna Expl., pf 67	68	H'k Electro 55	65
Air Reduction 3034	311/2	H'k Electro, pf 60	70
*Allied Chem. & D. 38	381/2	Int. Agricult 71/2	81/2
*All'd Ch. & D., pf. 841/2	8514	Int. Agricult., pf 34	35
*Am. Ag. Ch 35	36	*Int. Nickel 131/2	14
	53	*Int. Nickel, pf 80	84
*Am. Ag. Ch., pf 51			
Am. Chicle 101/2	14	*Int. Salt 45	60
Am. Chicle, pf 35	40	K. Solvay	
*Am. Cot. Oll 191/2	20	*Mathleson Alk 12	19
*Am. Cot. Oil, pf 45	51	Merck & Co., pf 69	75
Am. Cyan 15	20	Merrimac 77	79
*Am. Cyan., pf 35	45	Mulford Co 45	50
*Am. Druggists S 4	41/2	Mutual Co150	
Am. Glue 40	45	*National Lead 75	76
Am. Glue, pf 65	70	*National Lead, pf.103	104
*Am. Linseed 19	191/2	N. J. Zinc114	116
*Am. Linseed, pf 41	45	Niag. A., pf 96	100
*Am. Malt 12	13	Parke, Davis & Co. 83	8334
*Am, Zinc 71/2	8	Penn. Salt 65	67
*Amer. Zinc, pf 25	27	Procter & Gamble676	695
Atlas Powder111	114	Procter & Gam., pf101	1011/
Atlas Powd., pf 66	68	Rollin Ch 50	60
British Am. Chem., 1	**	Rol. Ch., pf 80	90
By. Prod. Co 57	65	Royal Baking Po 78	82
Carborundum136	1355/2	Royal Bak. Po., pf. 78	82
Carborundum, pf 1151/2	116	Sherwin-Williams \$20	540
Casein Co 30	45	Stand. Ch 90	100
Celluloid Co100	1021/2	Swan & Finch 35	40
Celluloid Co., pf102	103	*Tenn. C. & Chem 81/2	9
*Corn Products 72	7255	Tex. Gulf, Sul 1534	1516
*Corn Products, pf100	1021/2	Union Carbide 441/2	463/4
*Davison Chem 35	371/2	Union Sulphur	
Dow Chem	200	*Un. Drug 481/2	491/2
Dow Ch., pf	103	*Un. Drug, 1st pf 38	40
Du Pont107	112	*Un. Dyewood 56	60
Du Pont, pf 67	69	'Un. Dyewood. pf 94	96
*Freeport, Tex., Sul. 11	12	13 6 6	-
*Freept. Tx. Sul. pf. 91	93	U. S. Indus. Al 46	47
	130	ATT C T 1 - A1 -6	85
	95	V. S. Indus. Al., pr	32
Grasselli, pf 90		*VaCar. Ch 31½	75
Hercules, Powder135	140	*VaCar. Ch., pf 73	
Hercules, Powd., pf. 77	79	*V. Vivaudou 71/2	8
*Listed on	New Yo	ork Stock Exchange	

VIRGINIA-CAROLINA CO.'S SALES DECLINE

Stockholders of the Virginia-Carolina Chemical Co., have elected Lucien Oudin and H. M. Tucker directors in place of A. J. Hemphill and T. W. Watts, deceased. All of the retiring directors were re-elected. C. G. Wilson, president, in his remarks to stockholders, called attention to the difficulties under which the company was forced to operate during the last fiscal year and which resulted in a deficit compared with surpluses for seven years. Mr. Wilson said that the gross turnover of sales was \$87,058,974 in the year ended May 31, 1921, compared with \$138,918,235 in the previous year. The reduction resulted from a lesser volume of business and a reduction in prices.

In connection with the fertilizer business, Mr. Wilson pointed out that owing to the state of the markets prevailing during the first months of the fiscal year 1920-1921, the season when a large part of the company's needs are contracted for, the unit cost of fertilizer materials averaged higher than at any time in the company's history. Economies have been put into effect and wages reduced to prewar standards.

Wall Street interests say that the quarterly dividend of \$1 and 50 cents extra dividend usually disbursed by the Corn Products Refining Co. to holders of common stock is being earned. It is estimated that plants are running at 80 per cent of capacity, grinding 120,000 bushels of corn a day. The company is understood to be doing a large business with Germany. The potato crop throughout that country has been a failure and to encourage starch shipments the import duty has been taken off indefinitely. As a result German starch consumers are placing large orders in this country.

The Hercules Powder Co. has declared an extra dividend of 1% on the common stock in addition to the usual quarterly dividend of 2% on that issue, both payable Sept. 24 to holders of record Sept. 15. An extra dividend of the same amount was declared three months ago.

Chemical Salesmen's Ass'n Is Launched

Charter Members Organize Manufacturers' Salesmen's Association - Burton T. Bush Elected President-Other Officers and Executive Committee Representing All Branches of the Industry-Dinner and Open Meeting to Be Held During Chemical Exposition

Under the good salesmen's motto, "Let's Go," ninetysix salesmen of all chemicals from alkaloids to zinc launched the Salesmen's Association of the American Chemical Industry at the Chemists' Club, Wednesday evening, Sept. 7.

Enthusiasm broke forth in repeated outbursts of applause and the spirit of good fellowship continually bubbled over in laughter at the witty sallies which punctuated the proceedings. It was a typical salesmen's gathering and the enthusiasm displayed speaks well for the success of the new organization.

The meeting was called to order by Fred E. Signer, Chairman of the Organization Committee, which for the past six weeks has been drafting the Constitution and laying working plans. After a reading of the roll of the out of town salesmen who have joined the Association, Mr. Signer called upon Williams Haynes, the prime mover in the new organization who has served as Secretary of the Organization Committee, to explain the purposes.

A Real Salesmen's Organization

"The chemical industry," Mr. Havnes said, "while it sails in one boat, is divided into three water-tight compartments, heavy, coal-tar and fine chemicals, and a primary purpose of this Salesmen's Association is to bring together the selling forces of the American chemical manufacturers to a common meeting place and to supply through the salesmen a common ground for work for the good of the whole of the industry. Membership is of individuals, and when John Smith joins, stands upon the floor at our meetings, he does so as John Smith, Salesman, not as a member of the sales force of the Jones Chemical Corp. There is no intent to dabble in price fixing, in questions of company sales policy, in industrial politics. On the other hand, it is not a salesmen's "trade union."

Burton T. Bush emphasized the service that the organization of salesmen can be to the industry at large, saying: "I should like to meet an executive who today is not, to quote from the proposed Constitution, 'directly engaged in sales promotion work,' and I can see where American chemical salesmen, banded together, can co-operate to make better and more effective the selling conditions that exist in all branches of our industry. Our chemists in their research work, our executives in their managerial problems know that the net results of their thought and work is translated into dollars by the sales forces. And when two thousand American chemical salesmen organized in this Association speak, their voice carries far."

T. R. L. Loud of the New York Quinine & Chemical Co., A. H. Pierce, Grasselli Chemical Co., E. J. Barber, The Barrett Co., Francis M. Fargo, Calco Chemical Co., also spoke, endorsing the idea and praising the work of the Organization Committee.

The First Officers Elected

Upon the motion of A. A. Wasserscheid, the proposed Constitution was unanimously adopted and it was immediately voted to suspend those clauses pertaining to nomination of officers by a Nominating Committee and to proceed with the election. The Organization Committee presented their nominations for officers for the





A. A. Wasserscheid Burton T. Bush Treasurer Salesmen's AssociationPresident Salesmen's Association

first term and each name presented was a signal for an outburst of applause.

The following were unanimously elected: President, Burton T. Bush; vice presidents, Francis L. McCartney, Theodore R. L. Loud, Charles B. Hall; secretary, Williams Haynes; treasurer, A. A. Wasserscheid; executive committee, to serve 3 years, Fred J. Signer, Ralph Dorland; to serve 2 years, E. J. Barber, John W. Boyer; to serve 1 year, Charles F. Abbott, A. H. Pierce.

President Bush appointed the following chairmen of the Committees: Membership Committee, John A. Chew; Publicity Committee, Justin R. Weddell; Entertainment Committee, H. B. Prior; General Affairs Committee, Charles N. Turner. The chairmen of these Committees will propose the names of the men that they want to work with them during the coming year.

Dinner-Sept. 16, at the Exposition

The "let's go" spirit of the meeting was brought forth in the prompt and unanimous decision to hold a dinner next Thursday evening at the Eighth Coast Artillery Armory, and the Entertainment Committee was instructed to provide "a good time for all," with "two prominent speakers and a jazz band." In these times, so one member jokingly suggested, it will be impossible to work a big dinner fee gracefully into the expense account, accordingly the cost per plate is to be kept low.

All enrolled members of the Association are to bring with them members of their own staff and their friends who are eligible for membership and an open invitation is extended to all members of the sales or advertising staffs of the American manufacturers of chemicals to attend this dinner. Tickets may be obtained from the Chairman of the Entertainment Committee, H. B. Prior, Grasselli Chemical Co., 347 Madison Ave., New York

Applications for membership may be obtained from the Secretary, Williams Haynes, 3 Park Place, New York City. The initiation fee is \$10 and the annual dues, \$5, and check should accompany applications.

The enrolled charter members of the Salesmen's Association are as follows:

Arthur J. Anderson, Grasselli Chem. Co.; R. C. Anthony, Henry W. Peabody & Co.; R. E. Apthorp, Essex Aniline Works, Boston, Mass.; Geo. Ashworth, Dow Chem. Co. H. E. Baer, Durex Chemical Corp.; C. C. Baird, Baird & McGuire, Inc., Holbrook, Mass.; V. A. Belcher, N. J. Zinc Co.; M. Alvah Blanchard, James A. Blanchard Co.; John W. Boyer, Mathieson Alkali Wks.; Harold Braddock, Nat'l Anlline & Chem. Co.; Burton T. Bush, Antoine Chiris Co.
G. Lee Camp, Dow Chem. Co., Midland, Mich.; H. G. Carroll,

Wing & Evans, Inc.; W. Hepburn Chamberlain, Hooker Electrochem. Co.; John A. Chew, Warner Chem. Co.; F. L. Childs. Heyden Chemical Co.; R. N. Chipman, Chipman Chem. Eng. Co.; J. S. Cooke, Calco Chem. Co., Bound Brook, N. J.; C. S. Curtis, Abbott Laboratorles, Chicago, Ill. John L. Dabbs, Du Pont Co., Charlotte, N. C.; Wilson I. Dean, Dow Chem. Co., New York; Ralph E. Dorland, Dow Chem. Co., New York; Ralph E. Dorland, Dow Chem. Co., New York; Ralph E. Dorland, Dow Chem. Co., New York; Engera & Co.; F. W. Duerk, F. W. Frost & Co., Inc. L. Ledwards, Chipman Chem. Eng. Co., Inć.; Geo. M. Eno, Grasselli Chem. Co.; T. G. Erskine, Tower Mig. Co.

F. M. Fargo, Jr., The Calco Chem. Co., Bound Brook, N. J.; H. Foster, F. W. Frost & Co.

W. F. George, W. F. George Chemicals; Bernard N. Glick, Industrial Chem. Co.; Walter Goff, Monsanto Chemical Works; Ralph Gretsch, The White Tar Co.

P. S. Hansen, H. J. Baker & Bro.; Chas. B. Hall, Cleveland Cliffs Iron Co., Cleveland; H. E. Hall, Com'l Solvents Corp.; A. B. Hanby, Raritan Aniline Wks., New Brunswick, N. J.; Williams Haynes, "Drug & Chemical Mkts."; Alfred J. Higgins, Zinsser & Co., Hastings-on-Hudson, N. Y.; J. F. Hollywood, Marietta Refining Co.

A. B. Johnson, Dicks-David Co.; D. H. Jonas, Tower Mfg. Co.; Wm. E. Jordan, Wm. E. Jordan, R. J.; M. H. Klein, The Grasselli Chem. Co.

Chem. Co. J. D. Lowery, Butterworth-Judson Corp. F. L. McCartney, Monsanto Chem. Wks., St. Louis, Mo.; Frank McDonough, Norvell Chemical Corp.; H. J. McGuire, Balrd & McGuire, Holbrook, Mass.; O. K. Mayland, Commonwealth Chem.

McGuire, Holbrook, Mass.; O. K. Mayland, Commonwealth Chem. Corp.
Braxton R. Nagle, Warner Chem. Co.
Alexander T. O'Brien. Pharma Chem. Corp.
A. H. Pierce, Grasselli Chem. Co.; Morris R. Poucher, Du Pont Co., Wilmington, Del.; H. B. Prior, Grasselli Chem. Co.
B. G. Quine, John Campbell & Co.
H. N. Replogle, Nat'l Anillne & Chem. Co.; A. C. Robertson, Rhodia Chemical Co.; M. S. Rosenthal, Stein, Hall & Co., Inc.
William Schlosser, West Disinfecting Co.; Harry J. Schnell,
"Oil Paint & Drug Reporter"; Adolph C. Schwarz, Roessler & Hasslacher Chem. Co.; Edwin C. Scott, Semet Solvay Co.; M.
J. Seeley, Antoine Chiris Co.; Norman Seydel, Seydel Co., Jersey City, N. J.; A. C. Shattuck, Jr., P. W. Drackett & Sons, Cincinnati, Oblo; G. T. Short, Wilckes Martin Wilckes Co.; Fred E. Signer, Butterworth-Judson Corp.; Freuman Smith, Contact Process Co., Buffalo, N. Y.; H. A. Stebbins, Powers-Weightman-Rosengarten; Francls Stelter, Grasselli Chem. Co.; Henry H. Stiller, Bush, Beach & Gent, Inc.; Geo. R. Stoettner, Atlantic Dyestuff Co., Chas. H. Stone, Atlantic Dyestuff Co., Boston, Mass.; Richard E. Sumner, The Calco Chem. Co., Bound Brook, N. J.
Phillp S. Tillden, Du Pont Co., Wilmington, Del.; Frederiok Trowbridge, Amer. Anillne Prod. Co., Chicago, Ill.; Burnell R. Tunison, U. S. Industrial Alcohol Co.; Chas. N. Turner, Newport Chem. Works, Passaic. N. J.
W. H. Van Winkle, W. H. Van Winkle, Inc.; E. C. Vollmer, Croton Color & Chem. Co.; Dr. H. Von Rueker, Contact Process Co., Buffalo, N. Y.
A. A. Wasserscheid, Mallinckrodt Chem. Wks.; B. P. Webster, Chipman Chem. Eng. Co.; Justin R. Weddell, Nat'l Aniline & Chem. Co.; H. R. Wemple, Texas Gulf Sulphur Co.; Milton C. Chem. Co.; H. R. Wemple, Texas Gulf Sulphur Co.; Milton C. Chem. Co.; H. R. Wemple, Texas Gulf Sulphur Co.; Milton C. Chem. Co.; Geo. H. Whaley, John Campbell & Co.; A. R. White, Mich. Electrochem. Co., Menominee, Mich.; W. N. Wilkinson, Union Sulphur Co.; Carence C. W. Wilson, Du Pont Co., Philadelphia, Pa.; J. Wrench, Industrial Chem. Co.

Mich.; W. N. Wilkinson, Union Sulphur Co.; Clarence C Wilson, Du Pont Co., Philadelphia, Pa.; J. Wrench, Indu Chem. Co. F. G. Zinsser, Zinsser & Co., Hastings-on-Hudson, N. Y.

PEROXIDE DETERIORATES IN POOR GLASS

Stating that poor quality bottles were a big factor in the breaking down of hydrogen peroxide solution, Dr. Paul Poetschke, explained the action last week before the Division of the Chemistry of Medicinal Products, American Chemical Society, at Columbia University. He said in part: "Carefully conducted experiments," said he, "confirm the fact that traces of alkali dissolved in glass bottles cause rapid deterioration of hydrogen peroxide. Manufacturers have not given sufficient attention to the selection of glass bottles of suitable quality for bottling hydrogen peroxide, with the result that undue deterioration has been charged frequently to impurities in the hydrogen peroxide when defective glass was responsible. Experiments made by storing hydrogen peroxide in the dark and in vari-colored light show that solutions keep infinitely better if stored in the dark. Orange and red light afford some protection over white light, whereas blue light causes the greatest deterioration.

Dr. Poetschke stated that such preservatives as acetanilid and quinine sulphate retard the decomposition of the useful disinfectant, but that all preservatives are less effective than is the storage in bottles of suitable quality and the exclusion of light.

Trade Notes and Personals

W. Forthmann of the German Potash Syndicate has arrived in New York and is studying the potash situation in the American market.

The Commercial Solvents Corp. has registered a British address at 10A Featherstone Buildings, High Holborn, London, W. C. The office is in charge of W.

H. B. Moore is now associated with E. R. Smeade & Co., 2 Rector street, New York. Mr. Moore was formerly manager of the vegetable oil department of Garrigues & Co.

A correspondent writes the "New York Times" that it is no wonder Germany's war reparations "stick in her gills—the word for reparations being WIEDERGUTMACHUNGSLEISTUNGEN."

Jungmann & Co. have reorganized and will import and export chemicals, drugs and raw materials. offices are at 150 Nassau street, New York. Dr. J. Jungmann is president, and Paul Gutschow secretary-treas-

J. H. Papen and K. H. Jaeger formerly officers of the Associated Pharmacists and the Fraser Tablet Company of Brooklyn are now managing the business of K. H. Jaeger & Co., 165 Broadway, bankers' factors in the drug and chemical trades.

Dr. Beckmann has an article in the Berlin "Tageblatt" in which he accuses the Du Ponts of engaging a number of leading chemists of the big Elberfeld dye works at large salaries, with a view, Dr. Beckmann alleges, of appropriating the secret processes of German dye manufacture.

Sir Edward Thorp, president of the British Chemical Association, appealed to scientific men in a paper read before the Association, last week, "not to employ their talents in devising means to develop and perpetuate a mode of warfare which is abhorrent to the higher instincts of humanity."

American purchasers of German goods now arriving in this country are complaining of the quality of the merchandise. Apparel merchants, some of whom hastily made large purchases in the German markets, expecting to make a "killing," now say that the shipments they are receiving contain many wrong sizes and are undesirable in other ways.

The Standard Chemical Corp., of Baltimore, a company chartered recently with capital stock of \$300,000 has taken over the Moselle Laboratories and the Meltex Manufacturing Co. The officers and directors include J. Lester Risenfield, president; Sidney T. Manning, vice president; Luther E. Mellen, treasurer; J. Charles Fagan, secretary, and William S. Hammond.

Paul Belle, head chemist, and Victor Marmonier, assistant chemist, of the Lyons Piece Dye Works, Paterson, N. J., who were arrested last week on charges of conspiracy to cheat and defraud and of receiving bribes in connection with the alleged theft of \$15,000 worth of chemical dyestuffs purchased through them for the company, were held in \$8,500 bail each for action by the Grand Jury. William A. Christmas, a Brooklyn chemical dealer, from whom the dyestuffs were purchased, was arrested on the conspiracy charge, and also on a charge of giving bribes in connection with the case.

REPORT ON COLONIAL TARIFF POLICIES

The United States Tariff Commission has issued a report on Colonial Tariff Policies. It describes the tariff policies and certain phases of colonial administration in the colonies of Great Britain, France, Italy, the Netherlands, Belgium, Portugal, Spain, Japan, and the United States. It also deals with the mandated territories created from the former German colonies and the Turkish Empire. Because of the development of American export trade and the increasing dependency upon certain raw materials produced in colonial areas, because of the growth of American shipping and the extension of our investments in foreign countries, the United States is becoming more and more concerned with the commercial policies pursued by the great powers in their colonial possessions.

This subject of colonial tariff policies forms an increasingly important problem in the adjustment of the commercial relations of nations and should be considered in enacting any legislation affecting commercial agreements or in adopting any measures to formulate the commercial policy of this country. Industrial nations are becoming more and more dependent upon the great colonial areas which constitute half of the earth's surface and it will contribute to harmony and good will in the world if these problems can be settled through conference. The policy adopted by the United States in the present state of international relationships will doubtless have its influence on the policies of other colonial powers.

USED \$2,000,000 OF GLASS CHEMICALS

An official report issued by the Canadian government on the glass industry in Canada, gives the amount of materials used during 1918 as follows:

Kind	Unit of Measure	Quantity	Cost at Works	price per unit
Glass or silica sand (T	ons, 2000 fbs.	40,344	\$155,854	3.86
Soda ash (carbonate of				
soda)	44	13,468	635,068	47.15
Nitrate of soda	**	95	7,905	83,21
Limestone	41	4,490	18,076	4.02
Lime	44	2,190	18,046	8.24
Carbon	40	7	140	20.00
Arsenic, white		. 68,314	8,694	0.12
Manganese dioxide	44	18,535	1,414	0.07
Litharge & red lead	**************	169,987	17,764	0.10
All other chemicals			74,556	****
Boxes, cases, etc		****	367.946	
All other miscellaneous	materials	****	751,276	****

Total \$2,056,739

Chemicals mainly for use in the glass industry in Canada, were imported in the following quantities in 1918:

.,	Quantity	Value
Materials	Tons	
Soda ash or barilla	45,569	\$1,973,640
Soda, sulfate of, crude, known as		
· salt cake	34,387	676,571
Soda, ntrate of, or cubic nitre	51,996	4,077,903
Lime	4,987	53,745

SODIUM FLUORIDE PROTECTS PULP

Experiments to find a chemical which will protect pulp and pulp wood from decay have resulted in a report by the American Paper and Pulp Association and the U. S. Forest Products Laboratory at Madison, Wis., that sodium fluoride seems to be the best disinfectant, with borax a close second. Boric acid is equal or somewhat superior to borax, but the greater cost throws it out of competition. Sodium dinitrophenolate in ½ per cent, concentration appears very promising, with an antiseptic efficiency equal to anything tried, but the yellowish chemical discoloration of the pulp may prove objectionable for some purposes. This readily washes out, however, although it may leave the pulp somewhat browner than normal.

PHARMACISTS INSTALL OFFICERS

(Special to DRUG AND CHEMICAL MARKETS)

New Orleans, Sept. 14.—The American Pharmaceutical Association in national convention here listened to an address by the retiring president, Charles H. Packard, on the prohibition law. He urged observance of the regulations by all druggists in spirit and letter, praising the effects of the law and recommending that the Association follow the course paved by the medical association in adopting resolutions opposing the use of alcohol as a medicine beverage except in "the preparation and preservation of pharmaceutical products." Reorganization of the American Pharmaceutical Association and the establishment of a permanent home in a central part of the country, advancement of the standards of pharmacy and increased activity in the matter of research work were other recommendations submitted.

The Association endorsed the Senate bill providing for the adoption of the metric system of weights and measures. A committee was appointed to deal with the handling of liquors by druggists.

Samuel L. Hilton of Washington, D. C., was installed as president of the association for the 1921-1922 term. Charles E. Caspari, of St. Louis, will be first vice-president; David F. Jones, of Watertown, S. D., second vice-president; Hugo H. Schaefer, New York City, third vice-president. New members of the council installed were: Henry M. Whelpley, of St. Louis; George M. Beringer, of Camden, N. J., and John G. Godding, of Boston.

Cleveland was selected for the next place of meeting of the association.

MAKING COTTON DUCK FIREPROOF

Canvas can be so treated with various water-proofing substances that it will withstand exposure to the weather for at least a year. The results of extensive experiments are given in the "Journal of Industrial and Engineering Chemistry" by F. P. Veitch and T. D. Jarrell, of the Bureau of Chemistry of the United States Department of Agriculture. The scientists built canopies of canvas and coated them with waterproofing materials made according to different formulae. R. L. Sibley, of Elizabeth, New Jersey, a member of the American Chemical Society, reports that of three types of fire-proofing tested by him sodium tungstate had the least effect on the breaking strength of the fabric and therefore the least weakening action. He recommends 3.5 per cent solution of sodium tungstate as an excellent fire-proofing agent for the treatment of cotton fabric of which the breaking strength and wearing qualities must not be materially weakened.

SEIZE NARCOTICS VALUED AT \$1,000,000

Opium, cocaine, alcohol, brandy, wine, and cordials estimated to be worth nearly \$1,000,000 were seized by Revenue officers on board the Greek steamer King Alexander, formerly the Hamburg-American liner Grover Cleveland at a Brooklyn pier. Resistance by the crew resulted in the shooting of eight sailors, and it was found necessary to club about 20 others into submission. The ship was seized and more than 300 of the crew arrested. A smuggling plot was revealed involving Customs employees and pier watchmen. Credit for the success of the seizure is given to Ralph Oyler, member of the Narcotic Squad, and U. S. District Attorney Collins. Sabath Mentinths, fourth officer of the ship, is missing. One bag of narcotics valued at more than \$100,000 was lost overboard in transferring it to a launch.

The General Smelting Co., Stock Exchange Building. Philadelphia, Pa., has taken bids for the erection of a new one-story plant to be located at Bath and eWstmoreland Streets.

The Heavy Chemical Market

Current Spot Quotations of Heavy Chemicals, Pages 540-541

LESS COMPETITION FROM ABROAD

Advances In Heavy Chemical Prices In Germany Expected to Improve Local Conditions—British Quotations Also Firmer—Soda Ash Still Weak—White Arsenic Is Lower

PRICE CHANGES IN NEW YORK (Stocks in First Hands) Advanced

Ammonium Chloride, white imp., 1/4c lb.
Soda Prussiate, 1/4c lb.

Declined

Arsenic, white, 1/20 lb.
Magnesium Sulfate, 1mp. tech.,
5c cwt.
Potassium Permanganate, 1c lb.
Soda Ash, (resale) 10c cwt.

Trend of the Market

	Today	Week	Month	Year
Acetic Acid, Glacialb.		\$.10	\$.11	\$.121/
Sulfuric Acid, 66 degton Bleaching Powder Works. 100 lbs.		18.00 2.05	18.00 2.40	6,00
Copper Sulfate100 tbs.		5.00	5.25	8.25
Potash, Caustic	.093/4	.0934	.093/4	.15
Soda Ash, 58 p.c		2.10 3.90	2.25 4.15	3.00 4.86
Potassium Bichromate		.113/4	.12	.34
Average	3.490	3.501	3.614	4.950

Business in heavy chemicals has been showing gradual though spotty improvement. Buyers are becoming more confident of the firmness of price levels and are gradually increasing their demands as consuming demand for their products increases. Conditions that have hampered trade during recent months seem to be showing signs of slowly clearing up. Imported goods continue to rule the general market but indications from abroad are that prices are rising there. German prices are firmer in spite of the recent slump in exchange rates, and it is expected that the recovery from the slump will force German exporters into a much firmer position which will be reflected in prices here. English exchange is somewhat weaker but prices named for English chemicals for import have not fallen but on the contrary are showing signs of greater firmness.

Prices are fairly firm with little pressure noted from sellers. Imported white ammonium chloride and yellow prussiate of soda are firmer with activity noted in the latter item. White arsenic and imported technical magnesium sulfate are weaker on slow demand. Imported potassium permanganate is lower. Caustic soda is fairly firm but soda ash is weakening under pressure of offers from importers. Acids are steady although inactive.

Acid, Acetic—Prices are quoted at variance by different makers. The carlot basis for 28% acid is \$2.50@ \$2.75 per hundred according to brand. Glacial acid is quoted at 10c@11c per pound according to quantity and brand.

Acid, Hydrofluoric—Prices are weak and demand slow. The basis of quotation from makers is 12c@13c per pound for 48% acid in carboys. Outside holders are able to shade these figures somewhat.

Acid, Mixed—Demand shows a little improvement but prices are held at former levels of 93/c@10c per unit of nitric and 1c@11/4c per unit of sulfuric.

Acid, Muriatic—Consumers are showing some interest but as a rule the market continues quiet and at former levels. Makers are somewhat at variance on prices which are based on \$1.50@\$2.00 per hundred for 20° acid in carlots and less in carboys.

Acid, Sulfuric—Prices are firmly held on a basis of \$18.00@\$20.00 per ton for 66° acid in tanks cars f.o.b. works and reports of sales at lower figures are emphatically denied. Interest generally is improved on the increased activity in fertilizers following strength in cotton. Makers quote \$11.00@\$16.00 per ton for 60° acid although some makers are unwilling to sell below \$13.00 per ton.

Alums—Demand has been fairly well sustained and prices are quite firm at recent levels. Lump ammonia alum is quoted at 3½c@3¾c per pound and lump potash at 3¾c@53¼c per pound by importers and domestic makers as price bases.

Ammonium Sulfate—Commercial sulfate is steady at \$2.00@\$2.75 per hundred according to seller, the lower price being quoted on imported sulfate. Iron free sulfate is quoted at \$2.50@\$3.00 per hundred according to brand and quantity.

Ammonium Chloride—Business is dull but higher cabled prices have forced importers to raise their prices slightly on white granulated. Present quotations on white granulated from importers are 6c@61/4c per pound and from domestic makers, 7c@71/4c per pound. Gray granulated is steady with importers at 63/4c@7c per pound and 7c@71/4c per pound with makers.

Ammonium Sulfate—The heavy demand of the past few weeks is working itself out and prices are showing some tendency to sag back to former levels. Bulk sulfate at works is to be had around \$1.90 per hundred where available at all. F.a.s. prices are around \$2.40 per hundred.

Arsenic—Continued inactivity has forced further weakness in white arsenic prices which are quoted lower at 6½c@6½c per pound. Red arsenic is held firmly at 11c@12c per pound.

Barium Chloride—Importers prices tend weaker although still quoted at former levels of \$45.00@\$46.00 per ton. Arrivals are quoted below this level. Other barium salts share in the weakness.

Barium Nitrate—Importers are weaker on this item and quote 734c@10c per pound according to quantity.

Bleaching Powder—The gradual movement of resale bleach into consuming channels has brought the market into a somewhat firmer position. There is still some resale material to be had as low as \$2.05 per hundred works but as a rule holders are demanding \$2.25@\$2.50 per hundred f.o.b. works.

Copper Sulfate—Quotations generally are 5%c per pound or higher but importers sulfate in limited amounts is offered as low as 5c per pound.

Magnesium Sulfate—Holders of stocks of imported technical sulfate are offering lower at \$1.10@\$1.15 per hundred on the spot. Offers from domestic makers are not heard but their nominal price is \$2.00 per hundred fo.b. New York.

Potash, Caustic—Prices are holding at recent advances and are showing a tendency to greater firmness. Reports are heard that 43/c per pound is the best price at present possible but sizable lots are still to be had as low as 4½c per pound in some directions.

Potash, Carbonate—The market continues dead and prices meaningless.

Potassium Permanganate—Prices on imported permanganate are lower at 22c@24c per pound.

Soda Ash—Lower prices are named in most quarters as demand has been satisfied by imported goods. Spot resale prices are lower at \$2.00 per hundred. Makers prices are \$1.62½ per hundred basis 48% f.o.b. works (\$1.93 flat).

Soda, Caustic—Prices are firm at recent levels with \$3.80@\$4.00 per hundred quoted on the spot. Makers quote \$3.25 per hundred basis 60% f.o.b. works (\$4.12 flat).

Soda, Prussiate—Demand for yellow prussiate has continued in good volume and prices are firmer at 12½ c @13c per pound on the spot.

THOSE UNRELIABLE AMERICAN DYES?

Representatives of the textile trade, the garment industries and the dyestuffs manufacturers met Tuesday at the headquarters of the United Waist League of America, 29 East Thirty-second Street, to discuss complaints about American dyes regarding fastness, the correct use of dyes and the methods of dyers in applying colors. The meeting is the direct outcome of a conference held recently at the offices of the Associated Dress Industries of America at which a frank discussion of the problems of the American dye industry took place. Expert dye men and chemical men declared at this conference that the American dye industry had reached a stage of perfection equal to that of any other nation and that the American dyes were the equal if not superior of those produced in any other country.

David N. Mosessohn, executive director of the Associated Dress Industries of America, said: "The dye makers say the dyes are all right, but the trade doesn't know how to use them. The buck is passed all along the line. Therefore, we have decided to gather representatives of all the interests involved and we expect to arrive at a solution."

Statements were made by representatives of the various industries, giving their point of view and there was considerable sharp criticism of the misuse of colors. The result of the conference had not been announced up to the time that Drug & Chemical Markets went to press. Among those present were David N. Mosessohn, George W. Cole of the Standard Silk Dyeing Co.; N. W. Haynes, of Drug & Chemical Markets; Dr. Charles A. Herty, of the American Chemical Society; H. J. Kenner, executive director, and Richard H. Leo, director counsel, of the Associated Advertising Clubs of the World; Dr. L. J. Matos, of the National Aniline & Chemical Co., Dr. J. Merritt Matthews, of the American Dye Institute; and Henry Blum of the United Piece Dye Works.

Figures compiled by the United States Geological Survey from reports submitted by all zinc smelters which operated during the first six months of 1921 show that the production of zinc from domestic ore in that period was 100,781 short tons, and from foreign ore, 1,-744 tons, a total of 102,525 tons, as compared with 205,-269 tons in the last half of 1920 and 258,108 tons in the first half. The stock of zinc held at smelters and in warehouse June 30 was 94,747 tons, having increased from 71,037 tons at the end of 1920 and 29,892 tons at the middle of that year. From the foregoing figures and from the statistics of imports and exports as recorded by the Bureau of Foreign and Domestic Commerce, it is calculated that the apparent consumption for the period was 83,965 tons, as compared with 147,783 tons in the last half of 1920 and 175,268 tons in the first half.

SOURCES OF DOMESTIC POTASH

Arthur C. Harragin, vice president and treasurer of the U. S. Potash Producers' Association, says that ample supplies of potash for current and future needs are recoverable from domestic sources without recourse to imported goods. Quoting from Government reports he states that the brines of Searles Lake alone contain sufficient potash in solution to fill the entire needs of the country for the next eighty years. In addition the greensands of New Jersey, the dust from cement mills and various other sources of supply are available and waiting development. This, according to Mr. Harragin, answers the question of supplies at hand.

In regard to processes Mr. Harragin points out that recent work on the brines in California has developed a process which enables the production of virtually pure potash by simple evaporation methods. Processes for the recovery of the other waste potash have not reached such a high stage of development largely because the incentive of protection has not been granted. Mr. Harragin states that he believes that the farmers of the country and their representatives would realize the desirability of domestic production if they would consider the possibility of a working agreement on prices between the French and German producers. Such an agreement, which, he contends, is far from improbable, would effectually control the market and exact a greater toll from the farmers than the modest tariff asked by the domestic producers.

"Proofs are not lacking," says Mr. Harragin, "of the ability of domestic producers to produce potash as cheaply as their foreign competitors. In addition there is always the possibility of the discovery of supplies of potash similar to the German and Alsatian deposits in our own salt beds. A moderate sliding scale duty such as is proposed would effectually insure the development of adequate supplies here and make the country absolutely independent of any possible Franco-German monopoly."

IMPORTS OF DYES DURING JULY

Washington, D. C., Sept. 14.—Imports of dyes and dyestuffs by countries during July were as follows:

		Alizarin alizarin		Col	lors or d	yes not
Countries	Po	ounds	Dollars	Pos	unds	Dollars
Belgium		****	*****		985	1,328
France					,811	59,099
Germany	87	,066	87,476	272	2,142	404,399
Italy		238	495	14	.762	19,790
Netherlands		352	174	1	.032	1,755
Switzerland				165	822	250,971
England			3,108		.876	8,696
Scotland					500	377
Canada			*****		4	7
Japan					66	73
Total	90),662	91,253	506	3,000	746,495
Countries I	ndigo,	natural	Indigo,	synthetic	Extracts coctio dye	ns for
	Lbs.	Dollars	Lbs.	Dollars	Lbs.	Dollars
Belgium 1	,535	7,068				*****
France				***	4,012	945
England 1	.524	732	2,122	726	1,010	-
Canada		11181	44144	110	30,497	2,440
Japan			*****	***	2,655	102
Total 3	,059	7,800	2,122	726	37,164	3,487

D. D. Christner, field geologist in the Bureau of Economic Geology of the University of Texas, announces the discovery of what may be the largest deposit of potash salts in the world in Crane County, Texas. From the results of his survey, Mr. Christner believes that the deposit is some 100 to 200 feet thick and will be found at a depth of 1,500 feet. Samples so far found showed 2 to 3 per cent and 16 per cent potash

The Fine Chemical Market

Current Spot Quotations of Fine Chemicals, Pages 536-538

IMPORTED BROMIDES EASE DOWN

Pressure of New Imports and Competition Cause Makers Cut Salicylates and Cocaine-Rochelle Salt Easier-Hydroquinone Reduced-Quinine Firm

PRICE CHANGES IN NEW YORK (Stocks in First Hands) Advanced

Soap, Conti's Castile, 50c case. Declined

Acid Salicylic, 2c lb.
*Ammon. Bromlde, 1c lb.
*Antipyrine, Sc lb.
Aspirin, Sc lb.
Camphor, Chin. ref., 2c lb.
Jap. slabs, cases, 2c lb.
Cocaine Hydrochloride, 50c oz.
*Formaldehyde, ½c lb.
Hydroquinone, 25c lb.

*Potass. Bromide, 1c fb.
*Potass. Permanganate, 1c fb.
*Pothelle Salt, ½c fb.
Salol, 10c fb.
*Sodium Cacodylate, 25c fb.
*Sodium Bromide, 1c fb.
Sparteln Sulfate, 7c oz.

*Resale or Imported

Trend of the Market

		Last	Last	. Last
	Today	Week	Month	Year
Acetanilid	\$.33	\$.33	\$.33	\$.50
Acid Citric, resellers	.45	.45	.45	.70
Calomel, American	.82	.82	.82	1.37
Camphor, Jap., ref	.70	.72	.75	1.20
Caffeine, Alkaloid	5.00	5.00	5.50	7.50
Iodine. Resublimed	3.50	3.50	3.50	4.35
Menthol	4.30	4.30 .	4.30	6.25
Morphine Sulfate	4.80	4.80	5.20	7.80
Potassium Bromide, Cryst	.24	.24	.24	.63
Quinine Sulfate, Java	.67	.67	.67	.80
Sodium Salicylate	.30	.30	.30	.50
Strychnine Sulfate	1.35	1.35	1.55	1.65
Average	1.90	1.90	1.99	2.72
		_		

The consuming industries are gradually recovering some degree of confidence,-rather hesitatingly and slowly to be sure, but nevertheless steadily. Low prices on a great number of items, prices well under the levels of pre-war days, are being taken advantage of to replace depleted stocks on a somewhat broader scale. The actual volume of manufactured medicinal products which has passed into consuming channels during the past week, represents a material improvement when compared with any period during the past year or more. At the same time, although business is better than it has been for some time past, it is still far from good. Low prices have been an important factor, and an upward movement of any duration for whatever cause, would undoubtedly see another complete retirement from the market.

Manufacturers have cut cocaine again owing to poor demand and foreign competition. Salicylates and salicylic acid have also been reduced by makers. Imported bromides have eased off further. Chinese refined camphor has softened. Small spot supplies have boosted the price of Conti's castile soap here. Resale antipyrine has eased down slightly. Other imported products which are noted at slightly lower levels on the spot include Rochelle salt, potassium permanganate, spartein sulfate and sodium cacodylate.

Acid Citric-A fair jobbing demand is noted for the acid in kegs. Price holds at 45c a pound spot. Nothing in a large way is moving. American manufacturers still at 47c@471/2c.

Acid Oxalic-Reports of limited offers of spot oxalic acid at 12c a pound are reported. Quoted in regular channels here at 15c@16c a pound as to seller.

Acid Salicylic-Leading producers have cut quotations on U.S.P. salicylic to an inside of 22c a pound, 100 pound lots. Plenty of resale material is offering here with little or no demand at 19c a pound. All salicylates cut in proportion. Sodium named by makers at 28c now. Resale goods held unchanged at 26c. Salol cut to 70c by makers and held unchanged at 60c by resellers. Methyl salicylate at 32c in makers' hands; resellers slightly lower at 31c. Aspirin at 60c in manufacturers' quotations but easier in one or two quarters at 55c.

Antipyrine-One lot available on spot at \$2.15 a pound. Other resale goods at \$2.20. Importers are demanding \$2.25 a pound firm.

Aspirin-Lots to be had at 55c spot. Makers at 60c. Seed Acid Salicylic.

Bromides-Slightly easier prices are again noted for imported bromides on the spot. Competition between importers is keen and prices are under pressure. Potash bromide is named all the way from 14c a pound inside up to 17c as to quantity and seller. Sodium bromide is held at 17c up to 20c. Ammonium bromide is available at 20c@22c a pound. American makers adhere to 24c for potash, 25c for sodium and 33c for ammonium.

Caffeine-Some stocks have been taken out of the market here and a firmer condition is indicated. Prices are unchanged, however, at \$4.60@\$4.75 a pound for resale and imported goods. Manufacturers quote \$5.00 @\$5.25 a pound.

Camphor-Larger lots of Chinese refined gum have been effective in softening the spot price. Holders are openly naming 68c and might take less on firm business. Japanese slabs at 70c in cases. Tablets at 78c@82c. American refined gum at 75c bulk basis in barrels with tablets ranging up to 84c.

Chloroform-Producers adhere to 43c a pound in drums. Resale goods and the stock of a small maker are offered here at 36c in drums and possibly 35c on firm business.

Cocaine-Manufacturers have reduced prices for cocaine hydrochloride fifty cents per ounce and now quote on a basis of \$6.00 an ounce for crystals while granular and powdered are \$6.25. Imported goods reported available on spot at \$6.00, possibly less. Competition from imported material and the restricted demand are responsible for the lower prices.

Cod Liver Oil-Indicated as firmer with some buying for the coming season. New crop Norwegian oil on spot at \$16.50@\$18.00 a barrel as to brand and seller. Old oil, in limited lots, offered at \$15.00@\$16.00. Newfoundland not a factor and practically nominal at \$15.00 @\$17.00.

Cream Tartar-Imported cream tartar in steady demand for small lots only. Guaranteed U.S.P. at 26c a pound spot while less can be done for off-color and questionable goods.

Formaldehyde-Continues weak and under pressure. Demand is small. Resale lots have changed hands on this market during the week at 11c flat. Makers are asking 12c unchanged.

Hydroquinone-Manufacturers have cut prices for hydroquinone and now quote on a basis of \$1.25 a pound for hundred pound lots.

Menthol-Continues quiet and unchanged. A slightly better demand was noted for jobbing lots last week but this has quieted down. For spot cases \$4.30@\$4.35 a pound is named while less than case lots are held at \$4.40.

Mercury-New imports hold the spot situation uncertain. Prices range from \$41.00 up to \$44.00 a flask for spot metal as to seller and quantity. Orders are small and of a jobbing nature mostly.

Potassium Permanganate-New lots of U.S.P. potassium permanganate are offered on the spot at 22c a pound. Ranges up to 24c as to quantity and seller. Weak and subject to keen competition.

Quinine-Continues in steady demand and is firm on spot at 65c for Japanese in 100 ounce tins and at 67c for Java. Well maintained and looking upward as the fall and winter consuming season approaches. American manufacturers adhere to 70c an ounce in 100s for sulfate.

Rochelle Salt-Some lots of imported Rochelle salt, U.S.P. quality, are available on spot at 191/2c, possibly 19c in barrels. Others quote 20c@21c a pound for good quality Rochelle. American makers adhere to 25c un-

Salci-Makers cut from 80c to 70c a pound. Resellers still at 60c. See Acid Salicylic.

Soap-Spot supplies of Conti's castile soap are ma-

terially reduced on spot and the price has been jumped to \$8.50 a case by importers here. Powdered U.S.P. white in barrels at 36c unchanged.

Sodium Cacodylate-New imported lots are quoted here at cheaper prices, \$3.60 a pound being named by one holder. Up to \$4.00 a pound is asked.

Spartein Sulfate-Spot goods are now available in small quantities at 60c an ounce. Ranges up to 70c an ounce as to seller.

Manufacturers of organic chemicals will meet at the Pennsylvania Hotel, New York, on Thursday, Sept. 15, at 2 p.m. The meeting will be addressed by Dr. Charles H. Herty, S. A. Wilder, and Dr. Ellwood Hendrick.

Several of the exhibitors at the chemical show whose offices are located downtown, New York, are reported to be taking the night boat to Albany each evening and riding back the short distance to the Armory by trolley.

ALCOHOL FOR MEDICINAL PURPOSES

Text of The Volstead Supplementary Bill as Revised By the Senate-Search Warrant Made Obligatory In Hunt For Liquor-No Revenue Tax Assessed on Lost or Stolen Spirits

(Special to DRUG AND CHEMICAL MARKETS)

Washington, D. C., Sept. 14 .- Following is a copy of the supplement to the National Prohibition Act as it passed the Senate; after revision of the measure passed by the House:

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the words 'person' "commissioner," "application," 'permit." 'regula-tion," and "liquor," and the phrase "intoxicating liquor," when used in this Act shall have the same meaning as they have in Title II of the National Prohibition Act.

words 'person' "commissioner," 'application," 'permlt." 'regulation," and "liquor," and the phrase "intoXtating liquor," when used in this Act shall have the same meaning as they have in Titel II of the National Prohibition Act.

Sec. 2. That only spirituous and vinous liquor may be prescribed for medicinal purposes, and all permits to prescribe and prescriptions for any other liquor shall be void. No physician shall prescribe, nor shall any person sell or furnish on any prescription, any-vinous liquor that contains more than 24 per centum of alcohol by volume, nor shall anyone prescribe or sell or furnish on any prescription more than one-fourth of one gallen of vinous liquor or any such vinous or spirituous liquor that contains separately or in the aggregate more than one-half pint of alcohol, for use by any person within any period of ten days. No physician shall be furnished with more than one hundred prescription blanks for use in any period of interty days, nor shall any physician issue more than that number of prescriptions within any such period unless on application therefor he shall make It clearly apparent to the commissioner that for some extraordlnary reason a larger amount is necessary, whereupon the necessary additional blanks may be furnished him. But this provision shall not be construed to limit the sale of any article the manufacture of which is authorized under section 4. Title II, of the National Prohibition Act.

If the commissioner shall find after hearing, upon notice as required in section 4, Title II of subdivisions b, c, d, or e of section 4 of Title II of said National Prohibition Act, that any article enumerated in subdivisions b, c, d, or e of section 4 of Title II of said National Prohibition Act that any article enumerated in subdivision by the commissioner may by appropriate proceedings in a court of equity be reviewed, as provided for in section 5, Title II, of said National Prohibition Act becommissioner that such uses it is made clearly to appear to the commissioner that such

further. That the commissioner may authorize the return to the United States under such regulations and conditions as he may prescribe any distilled spirits of American production exported free of tax and reimported in original packages in which exported and consigned for redeposit in the distillery bonded warehouse from which originally removed.

Sec. 3. That this Act and the National Prohibition Act shall apply not only to the United States but to all territory subject to its jurisdiction, including the Territory of Hawaii and the Virgin Islands; and jurisdiction is conferred on the courts of the Territory of Hawaii and the Virgin Islands to enforce this Act and the National Prohibition Act in such Territory and Islands.

Sec. 4. That regulations may be made by the commissioner to carry into effect the provisions of this Act. Any person who violates any of the provisions of this Act shall be subject to the penalties provided for in the National Prohibition Act.

the penalties provided for in the National Prohibition Act.

Sec, 5. That all laws in regard to the manufacture and taxation of and traffic in intoxicating liquor, and all penalties for violations of such laws that were in force when the National Prohibition Act was enacted, shall be and continue in force, as to both beverage and nonbeverage liquor, except such provisions of such laws as are directly in conflict with any provision of the National Prohibition Act or of this Act; but if any act is a violation of any of such laws and also of the National Prohibition Act or of this Act, a conviction for such act or offense under one shall be a bar to prosecution therefor under the other. All taxes and tax penalties provided for in section 35 of Title II of the National Prohibition Act shall, be assessed and collected in the same manner and by the same procedure as other taxes on the manufacture of or traffic in liquor.

If distilled spirits upon which the internal revenue tax has

on the manufacture of or traffic in liquor.

If distilled spirits upon which the internal revenue tax has not been paid are lost by theft, accidental fire, or other casualty while in possession of a common carrier subject to the Transportation Act of 1920 or the Merchant Marine Act, 1920, or if lost by theft from a distillery or other bonded warehouse, and it shall be made to appear to the commissioner that such losses did not occur as the result of negligence, connivance, collusion, or fraud on the part of the owner or person legally accountable for such distilled spirits, no tax shall be assessed or collected apon the distilled spirits, no tax shall be assessed or collected apon the distilled spirits so lost, nor shall any tax penalty be imposed or collected by reason of such loss, but the exemption from the tax and penalty shall only be allowed to the extent that the claimant is not indemnified against or recompensed for such loss. This provision shall apply to any claim for taxes or tax penalties that may have accrued since the passage of the National Prohibition Act or that may accrue hereafter. Nothing in this section shall be construed as in any manner limiting or restricting the provisions of Title III of the National Prohibition Act.

Sec. 6. That any officer, agent, or employee of the United States engaged in the enforcement of this Act, or the National Prohlbition Act, or any other law of the United States, who shall search or attempt to search the property or premises of any person without previously securing a search warrant as provided by law, shall be guilty of a misdemeanor and upon conviction thereof shall be fined not to exceed \$1,000 or imprisoned not to exceed one year, or both so fined and imprisoned in the discretion of the court.

Any person not a duly authorized officer, agent, or employee of the United States, who, under color or claim to be acting as such, in the enforcement of this Act, or the National Prohibition Act, or any other law of the United States, subjects or causes any person to be subjected to the deprivation of any rights, privileges, or immunities secured or guaranteed by the Constitution of the United States, shall be deemed guilty of a felony, and upon conviction thereof shall be punished by imprisonment for a period of not more than five years or by fine not exceeding \$10,000, or by both such fine and imprisonment.

Some amendments have been agreed to in conference

between committees appointed by the Senate and House, and the House has accepted these amendments. The Senate, however, has not acted on the amendments.

The Intermediate and Dye Market

Current Spot Quotations of Intermediates and Dyes, Pages 542-543

BUYERS PURCHASING MORE FREELY

Manufacturers Feel Confident That Congress Will Include Adequate Protection in the Fordney Bill—Some Speulative Movement in Betanaphthol and Dimethylaniline

PRICE CHANGES IN NEW YORK (Stocks in First Hands) Advanced No Advances

Declined

Acid Laurent's, 10c fb.

Tolidine, 5c fb. m-Toluylenediamine, 5c fb.

Trend of the Market

	Today	Last Week	Last Month	Last Year
Benzene, C. Pgal.	\$.27	\$.27	\$.27	\$.30
Naphthalene, flaketb.	.063/4	.063/4	.07	.161/
Phenoltb.	.089/4	.081/4	.09	.12
Nylene, 10 degreesgal.	.35	.35	.45	.45
Toluene, puregal.	.28	.28	.28	.35
Aniline Oillb.	.171/2	.171/2	.20	.271/
Benzaldehydetb.	.45	.45	.45	.65
Betanaphthol, disttb.	.32	.32	.34	.80
Paranitroaniline	.79	.79	.80	1.10
o-Toluidinetb.	.25	.25	.25	.35
Average	.0.303	0.303	0.317	0.455

Increased interest is noted in all quarters of the intermediate and dye markets. Business during the past few weeks and especially since Labor Day has been picking up rapidly. Buyers are entering the market more freely and are thought to have abandoned their previous attitude of immediate requirement buying at least in a large measure. The attitude of Congress seems to have had a great deal to do with the change as the trade in general is coming to believe more and more that the Fordney tariff bill will include protection of an adequate nature when it is ultimately passed. Consumers of dyes find their business improving as the fall season approaches, and are consequently more willing to take on stocks.

Price movements in the main have been arbitrary during the week and have had little meaning. This is especially true of the fluctuations reported on betanaphthol and dimethylaniline which have been purely speculative and have not had a real effect on the general level of prices. Reports of wholesale reductions by one of the large makers throughout his list has lacked confirmation and it is believed that his changes have brought him into line with others and have not reduced the price level appreciably. Manufacturers' reductions are reported on Laurent's acid, para-nitrotoluene, metatoluylenediamine, and tolidine base. Activity has been of such a nature as to force general price revisions.

Coal-Tar Crudes

Benzene—Supplies are still very scarce and it has been impossible to locate any stocks in resale hands below 41c per gallon including drums. Refiners are still short on stocks of pure, although they have been able to continue contract movement of 90%. Present prospects on pure benzene are no brighter and higher prices may result from increased demand.

Naphthalene—Prices are still weak with flake offered as low as 63/4c per pound. Balls are held at comparatively higher figures with 81/2c@9c per pound probably the best possible price. Crushed naphthalene has sold

as low as 61/2c per pound recently and it may be possible to duplicate this figure.

Phenol—Prices are unchanged with 8¼c per pound possible on large lots in 1,000 pound drums. Smaller lots are offered at 9c per pound. Business has been booked in fair quantity.

Toluene—Supplies are still hard to locate at any price. Demand is slow and no tendency has been noted so far to higher prices. Nominal prices are quoted at 28c@34c per gallon in tanks and drums by refiners.

Intermediates

Acid, Anthranilic—Prices are quoted by makers at \$1.20@\$1.40 per pound according to quality and quantity. Some business has been done.

Acid, Gamma—One maker is willing to sell as low as \$2.70 per pound on quantity lots now. Others are holding at \$2.75@\$3.00 per pound according to quantity. Some movement has been noted.

Acid, H—One of the large makers has withdrawn offers of H acid. Otherwise prices are quoted at \$1,10 @\$1.20 per pound according to brand. Movement in this acid has been limited.

Acid, Laurent's—Makers have reduced prices and are quoting 75c@80c per pound with fair demand.

Acid, Nevile & Winther's—Prices are held steady by makers who report improved demand. Quotations are given as \$1.40@\$1.50 per pound according to quantity.

Acid, Picramic—Fair movement is noted at 75c@80c per pound.

Acid, Salicylic—The market is more or less uncertain in view of the strong competition for limited business offered. Prices on technical acid are 18c@20c per pound according to seller.

Acid, Sulfanilic-Activity is noted at 27c@30c per pound.

Aniline Oil—The fact that the lot offered during the week at auction was sold beforehand at private sale seems to indicate better business in aniline. Resale lots are to be had at 17½c per pound although it seems impossible to do better than 18c@18½c per pound with makers. Quotations are heard up to 20c per pound but it is believed that this figure can be shaded considerably.

Benzidine Base—A rumored price reduction by one maker has been a disturbing influence in the week's activities. The general asking price is \$1.00@\$1.10 per pound and the rumored asking price is 95c per pound. This could not be confirmed, however, and is probably nothing more than a rumor. Other makers are much disturbed by it however.

Betanaphthol—Fluctuations of price without meaning were noted during the week but they were not generally followed. The market seems a trifle less weak with 32c per pound the bottom and many holders asking 33c@ 34c per pound. The nominal makers' price is still 40c per pound but it is understood that this figure can be shaded materially.

Dimethylaniline—Holders have shifted prices somewhat during the week, but the general level asked is still 45c@50c per pound.

Meta-toluylenediamine—Makers are quoting lower at \$1.10@\$1.20 per pound.

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Para-nitroaniline—Prices are steady at 79c@82c per pound with a fair consuming demand noted.

Para-nitrotoluene—Prices are named lower by makers at 80c@85c per pound.

R Salt—Prices are unchanged with buying improved. Quotations are 60c@65c per pound.

Tolidine—Makers have reduced tolidine to \$1.30@ \$1.35 per pound. Demand has been slightly improved.

CANADIAN DYE IMPORTS DECLINE

(Special to DRUG AND CHEMICAL MARKETS)

Toronto, Canada, Sept. 14.—The monthly report of the Trade of Canada for June gives the value of imports of dyes and tanning materials as follows: From Britain, \$28,366; United States, \$181,073; other countries. \$16,284; total \$225,723; as compared with imports from Britain, \$101,059; United States, \$552,729; other countries, \$72,932, total \$726,720 for June, 1920. For the three months ending June the figures were as follows: From Britain \$63,899; United States, \$534,307; other countries, \$170,202; total \$768,408,—as compared with imports from Britain, \$199,538; United States, \$1,355,619; other countries, \$132,677; total \$1,687,634 for the three months ending June, 1920.

Imports of aniline and coal-tar dyes, included in the above, during June, were as follows: From Britain 45,419 lbs., value \$24,023; United States 75,236 lbs., \$76,222; Germany, 1,769 lbs., \$8,034; Switzerland 1,000 lbs., \$8,146; total 123,424 lbs., \$116,425,—as compared with imports from Britain, 131,897 lbs., \$76,285; United States 312,212 lbs., \$276,107; Switzerland, 11,191 lbs., \$22,746; other countries 21 lbs., \$232; total 455,321 lbs., \$375,370. Imports for the 3 months ending June were: From Britain 88,262 lbs., \$54,508; United States 262,397 lbs., \$282,069; Germany, 26,940 lbs., \$56,972; Switzerland, 18,123 lbs., \$24,725; other countries 220 lbs., \$450; total 395,942 lbs., \$418,724—as compared with from Britain, 229,912 lbs., \$132,387; United States, 713,292 lbs., \$718,328; Switzerland, \$18,846 lbs., \$40,303; other countries, 21 lbs. \$232; total 962,671 lbs., \$891,250, for the period of three months ending June, 1920.

BERNARD CONE FAVORS DYE LICENSE

Bernard M. Cone, an official of the Cone Mills, Greensboro, N. C., addressing a meeting of the Greensboro Rotary Club, recently, urged the continuance of the licensing system for dyes. Mr. Cone said he was speaking against his immediate interests, but for his ultimate interests as a textile manufacturer. White Oak Mills are the largest denim mills in the United States. The embargo question is a life and death proposition insofar as the American dye industry is concerned, Mr. Cone said, who pointed out that England, France, Italy, and Japan have established embargoes against German dyestuffs.

Controlling the American market the Germans could reserve certain dyestuffs for themselves and withhold them from American manufacturers, thus securing a great advantage in competing for world trade, Mr. Cone said. He emphasized the fact that the dye industry is the "key industry" of the United States and its crippling would mean irreparable injury to a number of allied industries.

The New York County Convention of the American Legion with 63 posts represented, adopted a resolution that Congress be urged to immediately enact adequate measures to maintain a permanent, independent chemical industry in the United States "to serve this country in time of peace and to ensure a trained chemical personnel and adequate equipment and supplies for instant use in time of war."

The Editor's Correspondence

Textile Manager Urges Dye Protection

Editor, DRUG & CHEMICAL MARKETS:

In regard to the tariff and license of dyestuffs, I firmly believe that the American dye manufacturer should be protected. They have invested a great amount of money and it is an industry which this Nation needs.

I realize that the tendency of the American people is to buy where they can buy the best and cheapest. However, with the great trials which the world has passed through, it seems to me that every patriotic citizen ought to feel that this is something which should receive great consideration and great protection. I wish to state that in the past we have bought considerable dyestuffs of an English concern doing business in this country and we have the highest respect for their methods of doing business and we cannot forget the careful consideration they gave us during the war when dyestuffs were a scarce article. We have also bought considerable dye of American concerns and are buying some of them today.

We sincerely hope that the dyestuff business in this country will have protection so that they may continue and increase their output, which course will mean reduced prices. As far as I am concerned personally, I would not buy German dyestuffs at any price, as I am not one who forgets the past very easily.

Edward A. Bigelow, Manager,

Worcester, Mass., Sept. 6. The Hopeville Mfg. Co.

Frank D. Cheney's Warning

Editor, DRUG & CHEMICAL MARKETS:

I have read Mr. Stoddard's article in Drug & Chem-ICAL Markets of August 31 with much interest and agree with him as to the possible danger to our industries which are dependent upon dyestuffs, arising from Germany's ability in the future to attack these industries should she regain control of her dyestuff industry; in fact, I testified to this effect before the Senate Finance Committee at the hearings which were held upon the subject from December 8 to 13th of last year, the following being a quotation from that testimony:

There is one point that I would like to bring out which I do not think has been brought to your attention; that if Germany were to regain control of her dye industry she would have a strong club to hold over us in all our other industries into which dye enters. She could shut off supplies, for instance; she could limit supplies; she could hamper us in many ways while she is making her preparations to take those industries away from us as well. For those reasons I do not believe that either an anti-dumping law In its usually accepted sense, based upon the cost of manufacture, will accomplish the purpose, neither do I believe that a straight tariff, without regulating features, will accomplish the purpose. Therefore. I am firmly convinced that legislation similar in character to the proposed bill is the only possible way that we can be sure. Others will say the tariff will do it. We do not know that it will do it. I do not feel that we can afford to take any chances with the prosperity and the bappiness and the future of our country.

I feel very strongly about the necessity of thoroughly

I feel very strongly about the necessity of thoroughly protecting our dyestuffs industry, whether there is danger to the consuming industries of the character suggested above or not, and certainly hope that our Congress will eventually pass legislation which will give it complete protection until it is firmly established.

Frank D. Cheney,

Pres. Cheney Bros. Silk Mfg. Co.,

South Manchester, Ct., Sept. 7.

China has reverted to natural indigo on account of the high cost of the synthetic material in spite of the preference of the buyers for the latter. Imports of synthetic indigo are less than 25 per cent of pre-war.

The Oil Market

Current Spot Quotations of Oils, Tallows, Greases, Page 545; Naval Stores, Page 546

COTTONSEED OIL ADVANCE CONTINUES

Prices Show Effect of Tightness-Export Demand for Greases Increases—Growing Confidence in the Oil Market Apparent—Corn and Linseed Oils Higher

PRICE CHANGES IN NEW YORK (Stocks in First Hands) Advanced

Corn Oll, ¼c tb. Linseed Oil, 2c gal.
Cottonseed Oil, ¼c tb. Rosin, 20c bbl.
Turpentine, 5c gal. Declined

Cod Oil, N.F., 3c gal.

China Wood Oil, Spot, 21/2c lb.

Trend of the Market

		Last	Last	Last
	Today	Week	Month	Year
Cod Oil, N. F	\$.42	\$.45	\$.44	\$1.00
Degras, American, bbls	.031/2	.031/2	.041/2	.06
Lard, No. 1	.60	.60	.65	1.19
Menhaden, crd.* bbls	.25	.25	.30	.55
Neatsfoot, 20 deg. ct., gal	1.00	1.00	1.00	1.65
Red Oil, distilled	.071/2	.071/2	.063/4	.141/4
Stearle Acid, T. P	.111/2	.111/2	.103/4	.251/2
Coconut, Ceylon, Dom., bbls	.10	.10	.10	.15
Cottonseed, crude, tanks*	.073/4	.07	.051/2	.10
Linseed, Carlots, bbls	.75	.73	.75	1.25
Olive, denatured	1.10	1.10	1.45	3.15
Peanut, refined	.101/2	.101/2	.10	.16
Soya Bean, bbls	.081/2	.081/2	.071/2	.131/2
Average	0.365	0.365	0.395	0.752

Business in oils is improving more rapidly than in most other lines. Prices are showing the effect of tightness in cottonseed oil and export demand for greases of all qualities. Buyers are showing increasing confidence in the present price levels and shortness of stocks in most oils has caused strengthening generally with a few upward revisions of price. The present movement is looked upon by the oil trade as the beginning of a season of greatly improved business all along the line Prices are firmer and are showing a rising tendency.

The increased firmness in prices is reflected in several advances among vegetable oils which are in especially short supply. Corn, cottonseed, and linseed oils are higher and it is even predicted by some factors that higher prices may yet be expected on these oils. artificially high price of spot China wood oil has fallen to a more reasonablbe level. Coconut oil is very firm and prices quoted on palm oils are stiffening.

Cod oil is lower of the fish oils. Business in fair proportion has been going on in menhaden at the recent reduction but this has not been favorable to improvement in cod oil.

Animal oils have firmed up somewhat at recent levels but prices have not advanced. Export demand for greases of all grades has been showing improvement and prices here are higher but this increase has not yet reflected itself in oils.

Naval stores are more active. Demand from the soap trade for rosins has forced prices higher on all grades. Turpentine is higher both in primary markets and on

Vegetable Oils

Linseed Oil-Prices are higher on increased demand and the lack of stocks in nearby positions may be expected to force still further advances in prompt delivery. Quotations are based on 75c per gallon in carlots of barrels for both prompt and shipment oil and crushers are expecting an adjustment upward in the nearby price Foreign oil is not figuring largely in the present situation in spite of the fact that offers are heard as low as 65c per gallon for arrival. London spot prices are quoted at 40 shillings per quintal and Antwerp at 193 francs per 100 kilos.

Flaxseed prices in domestic markets are higher with Winnipeg quoting \$2.06½@\$2.07¾c per bushel and Duluth \$2.10@\$2.13½ per bushel according to position. Buenos Aires prices are lower at \$1.74 per bushel.

Castor Oil-Prices are steady at 11c per pound for No. 1 oil.

China Wood Oil-Recent high prices for spot oil have been broken by the arrival of large shipments. Present spot prices are down to 131/2c@14c per pound. Arrival prices are slightly higher however and c.i.f. quotations are given at 111/4 c@111/2c per pound in barrels.

Coconut Oil-Prices are stiffer although showing no quotable change. Export demand for both fats and soaps have aided in the firmness as well as the comparatively limited stocks available. Ceylon is quoted at 10c@101/4c per pound and Cochin at 103/4c@11c per pound in barrels. Coast Manila oil is uncertain with the nominal level around 81/4c@81/2c per pound in sellers'

Cottonseed Oil-Contrary to the expectations of some factors, cottonseed oil has continued to advance. Crude oil in buyers' tanks f.o.b. mills was quoted at 73/4c@8c per pound according to location. Prime summer yellow on the Exchange rose throughout the week and reached 95/8c@10c per pound toward the close. The opening of the week saw some wavering at this level but prices held fairly well.

Corn Oil-Refined corn oil in barrels on the spot is higher at 101/2c@11c per pound. Crude at mills has shown a slight advance in addition to those recently made and is now quoted at 71/4c@71/2c per pound in tanks.

Olive Oil-Denatured olive oil has remained stationary at \$1.10@\$1.15 per gallon on the spot. Foots are firm at 73/4c@81/2c per pound spot and 8c@81/4c per pound for shipment.

Palm Kernel Oil-Prices are firmer at recent levels. Quotations are 10c@101/4c per pound in barrels from limited spot stocks.

Peanut Oil-Crude oil is tight and quotations in buyers' tanks f.o.b. mills at 71/4c@71/2c per pound are heard. Spot oil is very scarce at a nominal figure of 8½c per pound in barrels. Refined peanut is steady at 10½c@11c per pound.

Perilla Oil-Prices are firmer on the spot at 93/4c@10c per pound in barrels.

Soya Bean Oil-Interest is centered in cottonseed oil and holders of soya bean oil are awaiting developments. Coast offers are at former figures of 61/2c@63/4c per pound in sellers' tanks but there is little activity noted. Spot barrels are firm at 81/2c@83/4c per pound. Refined oil on the spot is held at 91/2c@10c per pound.

Fish Oils

Cod Oil-The recent reduction by holders of menhaden oil has weakened cod oil and Newfoundland oil is quoted lower at 42c@44c per gallon in barrels. Tanks are quoted at 40c per gallon. Reports of lower prices were heard but it is believed that the prices quoted are fairly firm.

Menhaden Oil-Activity has continued in crude men-

haden at 25c per gallon f.o.b. mills. Refined grades are all markets of about 20c per barrel. The present range unchanged from former levels.

Animal Oils

Lard Oil-Prices are firmer at unchanged levels. The price basis is \$1.00 per gallon for prime and 60c per gallon for No. 1.

Naval Stores

Rosin-Increased demand has forced an advance in

DUTY ON CODLIVER OIL MAY REACT SAYS TRADE COMMISSIONER DEVINE

Newfoundland's Representative Believes American Tariff Would Result In British Interests Taking the Output-He Predicts Loss of World Leather Markets to United States Tanners

John M. Devine, Newfoundland Trade Commissioner, now in New York has been studying the proposed tariff on codliver oil included in the Fordney bill, and contributes his views to DRUG & CHEMICAL MARKETS in the

following statement:

"Apropos of the contemplated duty to be imposed on fish oils entering this country it is interesting to say a word about the Newfoundland cod and cod liver oil. As far as cod oil is concerned, it has been contended by some of the menhaden oil interests of this country that such will fill the bill as well as the imported article from Newfoundland. Tanners throughout the country, however, are practically unanimous in proclaiming that menhaden oil can never take the place of the oil that is made from the liver of the codfish. The rapid oxidization of menhaden oil as compared with the imported article piaces it entirely out of the question as a competitor against the Newfoundland article. Moreover, it cannot be contended that it is a good policy for any government to tax an article which will necessitate higher priced goods to the consumer. If the tanner decides that Newfoundland oil is necessary in the manufacture of his leather he is going to have it, duty or no duty, but if there is a high tariff he will add it to the price of his leather.

"Codliver oil is an article that has merit and contains certain constituent properties that are not found in other medicinal oils. A famous physician of New York City only recently stated to me personally that Newfoundland codliver oil contained certain properties that were very efficacious in treating a certain disease that had long baffled the best skill of the medical fraternity. In fact he went so far as to say that when it became more universally known he felt confident that the demand would always exceed the supply. Arguing along these lines surely no statesmen, who have their fellow countrymen's best interests at heart, are going to advocate a big tax on an article that is needed for the benefit of suffering humanity, more especially when in their own country they have no real substitute for such

commodity.

"Norway produces a very superior article in codliver oil and for a long time it was thought to be without peer, but chemical analysis shows that the Newfoundland article is equally as good if not better in every particular. Recent reports in fact state that the livers of the Newfoundland codfish, from which the oil is manufactured, are fatter, more nuttritious-of greater medicinal value than any other. Next down the list comes seal oil. This industry should be worth in the vicinity of \$1,000,000 and it does seem peculiar for Mr. Fordney to think about taxing this article. We are not getting up against any producers in this line in America that I am aware of. Time was when we produced and shipped large quantities of whale oil but this industry has dwindled alarmingly. I don't believe our output last year was more than 300 tons, possibly worth less than \$100,000.

of price is \$5.45 for B to \$7.20 per barrel for WW.

Turpentine-Prices in all markets are higher. Spot turpentine is held at 70c per gallon, an advance of 5c over last week. London prices have been advanced to 66 shillings 9 pence per quintal on increased demand there. Savannah prices are higher at 64c per gallon.

"You ask me what will be the effect should Uncle Sam levy a tax on our oils, Well, if they cannot be sold here we must necessarily look round for other markets. If the American tanners argument holds good that the rapid oxidization of menhaden oil never can permit it to be placed in the same class with Newfoundland oil, if it has helped in the past to turn out American leather of quality, it is only reasonable to assume that a ready market should be found for all we manufacture in Great Britain, more especially when it will enter over there duty free. Then by that time the very amusing spectacle may be witnessed of American tanners paying for menhaden oil at a price just as high as they hitherto paid for the superior Newfoundland article. Of course this is sure to happen if certain interests get control, while British leather manufacturers aided by a superior oil at a lower price will have captured the leather markets of the world.

"Possibly some of your readers will say this is far fetched but read the expert opinion of American tanners of long experience. Well then, you ask, what is the idea of America taxing this oil? Why should she do it? I don't know. In the final analysis when you ask me what will be the effect of this policy I can only answer that by Newfoundland adopting a British preferential policy it will mean that America gains nothing, but on the contrary loses a \$20,000,000 customer."

U. S. MAY LOSE NEWFOUNDLAND TRADE

Sir Robert Squires, Prime Minister of Newfoundland, who was in New York last week, on his way to Washington to confer with Government officials on the proposed tariff on fish and oil, explained to a representative of DRUG & CHEMICAL MARKETS the conditions of trade with the United States.

"The United States now consumes about \$1,000,000 of our fish and oil yearly. The tariff is meant to be a protection to home industries," he said, "but what serious effect can \$1,000,000 worth of any product have on your markets? It is infinitesimal in both quantity and value, and this becomes an irrefutable argument against any tariff aimed at Newfoundland. If in this way you tell us that you cannot buy our fish and oil, you cannot expect us to continue our trade with the United States. for we cannot use British, Spanish, French, Italian or any other foreign money in American markets without serious inconvenience."

"In considering the advisability of a tariff of 121/2 cents a gallon on oil and 134 cents a found on fish coming from Newfoundland the American Government must take into account what it has to gain or lose by such action. It has considerably more to lose. You must consider that Newfoundland has made a substantial shift in trade during and after the war from Eng-

land and Canada to the United States.

"The United States has every advantage in its trade with Newfoundland. Not alone do American shippers benefit by exchange and present duties as well as being a favored nation, but it has a trade balance of approximately 16 to 1 in its favor. Last year Newfoundland's purchases amounted to \$16,000,000 in this country and we sold to the United States only \$4,000,000 worth of fish and its products. However, 75 per cent of its exports to the States were shipped to New York and Boston for transshipment to the Mediterranean."

The Crude Drug Market

Current Spot Quotations of Crude Drugs, Pages 547-548

BOTANICAL TRADE CONTINUES OUIET

Demand Still Routine-Some Prices Firmer-Vanilla Beans Strong-Jaborandi Up-Licorice Bundles Easier -Cape Aloes Soft-American Saffron Higher

PRICE CHANGES IN NEW YORK (Stocks in First Hands)

Cantharides, Russ., 25c lb. Cloves, Zanzib., 1c lb. Jaborandi Lvs., 4c lb. Japan Wax, 1c lb.

Advanced tb. Malva Flowers, Blck., 50c tb.
Saffron, Amer., 15c tb.
Vanilla Beans, Mex., 25c tb.
Tahiti, 20c tb.
Shellac, T.N., 2c tb.

Declined

Acacia, Amb. Sts., ½c tb. Aloes, Cape, 1c tb. Bay Wax, ½c tb. Cubeb Berries, Pd., 10c tb. Galangal Root, 1c

, ½c lb.

Elm Bark, Select, 2c lb.

Powdered, 1c lb.
Licorice Rt., Bundles, 1c lb.
Manna, Sml. Flk., 2c lb.
Squill Root, Wht., 1c lb.

Trend of the Market

		Last	Last	Last
	Today	Week	Month	Year
Aconite Root, U.S.P	\$.22	\$.22	\$.25	\$.50
Buchu Leaves, Short	.85	.85	.85	3.50
Cantharides, Russian	2.00	1.75	1.75	3.50
Cocculus Indicus	.071/2	.071/2	.10	.22
Ergot, Spanish	1.30	1.30	1.25	3.00
Insect Powder, pure	.36	.36	.36	.70
Ipecac, Cartagena, powd	1.65	1.65	1.90	3.25
Nux Vomica	.11	.11	.12	.141/
Opium, gum	5.50	5.50	5.50	7.50
Rhubarb Root, H. D	.23	.23	.23	.70
Tragacanth, No. 1, ribbon	3.50	3.50	3.50	4.50
Wild Cherry Bk. thin nat	.09	.09	.09	.10
Average	1.34	1.33	1.39	2.30

The only manner in which the past week has differed from any other week for several months, has been in the reduced number of downward price revisions and a somewhat increased tendency of values to solidify at current levels. The apparent firmer position of prices is not attended by any marked expansion in purchases by the consuming trades, however. Routine orders for the same small quantities are still the order of the day. Basically, the crude drug situation is decidedly more stable and this condition can be traced to the cessation of downward movements in primary markets, and the withdrawal of a number of offers at low prices upon realization that collections in many instances have been greatly neglected this year. Spot purchases below country prices are still possible on a lot of items in this market.

American saffron holds its strong position with a further advance in price. An inquiry for jaborandi leaves here found stocks about depleted. Japan wax is still scarce and again higher. Cloves have scored another gain during the week. A small sale of black malva was made at a sharply higher price. Demand for Mexican and Tahiti vanilla beans continues brisk at advanced quotations. Manna is slightly cheaper. Selected and powdered elm bark is easy. Cape aloes have softened. Selected licorice in bundles is off a cent. Galangal and squill roots are down. Powdered cubebs are somewhat cheaper.

Crude Drugs

Agar Agar-Firm on spot. A good No. 1 at 65c and reported inside thereat. No. 2 at 53c and No. 3 at 42c ranging both ways as to quality.

Cantharides-Russian are firmer. The seller at \$1.75 now names best at \$2.00 for whole flies. Powdered at \$2.15@\$2.25. Chinese are firmer but unchanged in most quarters at 75c for whole and 80c for powdered. One names 90c for whole and \$1.00 for powder.

Ergot-Still firm and unchanged at \$1.30 a pound spot. Demand has quieted down. Consumers evidently await confirming of the bullish news from Spain.

Lycopodium-Supplies are named from \$2.85 up to \$3.25 a pound as to seller and quantity. Somewhat

Manna-Both large and small flake have been shaded during the week. Large flake on spot in cases at 73c a pound. Small at 37c and easy.

Nux Vomica-Buttons are quoted from 10c a pound up to 15c as to quantity, quality, and seller. Demand continues very limited and supplies have been allowed to accumulate here. Powdered, U.S.P. unchanged at 16c a pound in barrels.

Cascara Sagrada-Demand continues confined to small jobbing lots. Spot 1920 peel at 10c unchanged. New peel easy at 6c Coast.

Elm-Holders of spot bundles are now quoting 30c a pound openly for selected bark. The position is none too strong at this figure. Powdered and ground barks are cheaper at 18c a pound spot. Grinding held unchanged at 15c.

Soap-Large offers of soap bark both from primary markets and on spot. Tends to weaken in competition although prices are unchanged this week. Whole bark at 7c. Crushed easy at 91/2c. Cut at 10c a pound.

Beans

Vanilla beans continue to climb. Mexican whole are inside on spot now at \$4.25 ranging up to \$4.75 a pound as to quality. Cuts at \$3.75. Tahiti beans are also higher this week at \$1.50@\$1.60 a pound.

Berries

Cubebs are still quiet at 90c for whole. Stemless at \$1.00. Powdered cheaper here at 90c in one quarter, ranging up to \$1.00. Saw palmetto unchanged at 13c. Fish easy at 71/2c. Demand small.

Chamomile-Hungarians in steady routine demand. As to quality, 18c for a good grade ranging all the way down to 14c for shattered flowers. Romans generally held at 22c but reported available in one quarter at 20c.

Insect-Quiet but steady at 36c a pound for pure powder in barrels on spot. Demand is falling off gradually. Fifty per cent powder at 25c.

Malva-A small sale of black malva flowers was made last week at \$1.50 a pound. Little available. Blue quiet at 40c spot.

Saffron-The continued small supply of American saffron has driven the price up to \$1.25 a pound. Inquiry is good. Spanish saffron is dull and easy at \$13.00 for one pound tins.

Gums

Cape aloes has been reduced to 9c a pound for spot cases. Curacao easy at 7c with demand limited. Acacia amber sorts are reported available in one quarter at 91/2c inside. Most sellers asking 10c spot. No. 1 tragacanth ribbons named at \$3.40 but in quantity can be bought under \$3.25 for best quality.

Herbs and Leaves

Buchu—Quite a little bullish sentiment has developed in the case of buchu. Although holdings here are fairly large and demand continues confined to jobbers and jobbing lots, importers believe the current 85c is the low point. Some sellers quoting nominally up to 95c for spot bales. Still available at 85c, however, and at 87c for less than bale lots.

Henna—Still easy and subject to keen competition on spot. Sales reported at 18c although quoted chiefly a cent higher.

Jaborandi—Inquiries last week found very little available on spot. Holders immediately jumped prices sharply upward to 36c@38c a pound. One or two consumers were reported in the market.

Roots

Blood—Continues weak and with little or no support on spot at 14c a pound.

Galangal—Slightly cheaper here at 10c@11c a pound. Demand very limited.

Gentian—Does not move from the 8c position for spot whole. Ground at 12c.

Jalap—U.S.P. root is available here down to 15c a pound ranging all the way up to 23c or 24c for a high test. Powdered U.S.P. at 23c@25c.

Licorice—Selected bundles have been shaded slightly and are offered on spot at 21c a pound. Some sellers still ask 22c. Bales still held at 6c. Powder easy but in steady demand at 13c in barrels, possibly under this on a good sized firm order.

Senega—Has quieted down owing to falling off in export inquiry. On spot at 75c. Country offers little or nothing just now.

Squill—White squill root slightly cheaper here at 5c a pound.

Seeds, Spices, etc.

Celery—Inside on spot is now 14½ c a pound. Firmer. Cloves—Zanzibars higher and reported inside at 25c for bales.

Bay Wax-Easier on the spot at 191/2c a pound.

Japan Wax—Continues very scarce and strong. Best for standard goods in cases here is 25c a pound.

RENEWAL OF LIQUOR PERMITS FOR 1922

The National Wholesale Druggists Association announces that the officials of the Prohibition Commissioners office have agreed that members who use alcohol for manufacturing purposes and who, under the regulations, should apply immediately for their 1922 permits, will be relieved of a large amount of labor they were compelled to perform in connection with their permits for 1921. The Association says that the Bureau desires to receive not later than October 1, all applications for the renewal of permits and is planning to hasten action thereon with a view to issuing as many as possible before January 1, 1922, thus obviating the delays which have proved so vexatious during the past year.

UNITED DRUG PASSES COMMON DIVIDEND

Directors of the United Drug Co. met in Boston on Monday and voted to pass the current 2 per cent quarterly dividend on its common shares. The 1¾ per cent quarterly dividends on the first preferred and 1½ per cent on the second preferred were declared as usual. The stock is quoted at 48 to 48½ this week.

Louis K. Liggett, president said the reason for passing the common dividend lay in shrinkage of profits which accompanied marking down inventories June 30 last to market prices or lower, in conformity with general declines in values since the first of the year.

Of Interest in the Trade

The Dhar State of India has established chemical works for the manufacture of thymol.

J. A. Firestone & Bro., Scranton, Pa., have organized to import medical leeches and herbs and roots. The firm has in preparation a booklet upon the characteristics and uses of leeches which will be sent to any one interested. The firm has numerous foreign connections and expects soon to be in a position to supply American retail druggists upon very advantageous terms.

The schooner Lizzie V. Hall, which was to have loaded at Philadelphia 500 barrels of alcohol said to have been consigned to the Liberian Government, was refused clearance papers by the port authorities. Clearance was refused on the ground the schooner was unseaworthy. The alcohol, which was shipped here from a distillery in Rossville, Ind., was reconsigned and shipped to Greece on the French steamship Dorchet.

The Wm. Wrigley, Jr., Co., protested the assessment of certain gum called perillo gum, which was classified as crude chicle by similitude and assessed for duty at 15 cents per pound under Paragraph 36 of the act of 1913. The protestant contended that the gum was dutiable at 10 per cent ad valorem as a non-enumerated unmanufactured article under Paragraph 385, which claim was sustained by the Board of United States General Appraisers.

In reply to charges made by medical journals that German medicinals made in Germany for consumption abroad have been deliberately adulterated for the purpose of damaging the health of former enemies, a Berlin paper declares that the statements are entirely unfounded, but it admits that eight cases were discovered of innocuous adulteration of pharmaceutical products, which it says were due to the manipulations of illicit traders.

J. Schanzenbach & Co., importers and dealers in chemicals, oils, waxes, drugs and dyestuffs, 74 Cortlandt street, New York, announce that they have been appointed sales agents for L. Fechtwanger & Co. Mr. Schanzenbach was formerly with Laidlaw, Kelly & Co., and more recently with Bech, Van Siclen & Co., as manager of the chemical department. The members of the new firm are former heads of departments of Laidlaw, Kelly & Co.

The Board of United States General Appraisers has overruled the claim of C. W. Sheldon & Co., that certain gum classed as chiclet gum should be assessed at 15 cents per pound as crude chicle. The chicle was assessed at 20 cents per pound under the portion of Paragraph 36, which "eads, "refined or advanced in value by drying, straining or any other process or treatment whatever beyond that essential to the proper packing." The protest was overruled and the action of the collector sustained.

The conflict between Treasury Decision 3212, approved August 11, 1921, requiring intoxicating fiquors, including alcohol, to be shipped by express "when express facilities are available," and the prohibition contained in the Interstate Commerce Commission Order No. 3666 against the shipment of alcohol by express in lots exceeding ten gallons, has been adjusted. The Internal Revenue Bureau will not attempt to enforce the shipment of alcohol in barrel lots, or in lots exceeding ten gallons.

The Essential Oil Market

Current Spot Quotations of Essential Oils and Aromatic Chemicals, Pages 551-552

REACTIONS UPWARD IN ESSENTIAL OILS

Peppermint, Wormseed, Lemongrass and Sicilian Orange Higher—Spearmint Cut Again—Petit Grain Lower— West Indian Orange Down—Vetivert Off

PRICE CHANGES IN NEW YORK (Stocks in First Hands)

Oil	Cade, 10c fb. Camphor, Jap., White, 1c Lemongrass, 10c fb.	tb. Oil	Orange, Peppern	nint, N	atl., 15c	tb.	tt
	Oil Worm	seed, B	alt., 25c	tb.			
		Declined	1				

Oil Almond, Peach Kernel, 2	th.Oil Patchouli, 50c tb.	
Oil Bay, 25c lb.	Oil Pennyroyal, 5c tb.	
Oil Cedar Wood, 3c lb.	Oil Petit Grain, S.A., 15c fb.	
Oil Coriander, 50c fb.	Oil Sassafras, Natl., 10c fb.	
Oil Croton, 10c lb.	Oil Spearmint, 25c fb.	
Oil Hemlock, 5c fb.	Oil Vetivert, Bour., 50c fb.	
Eucalyptol, 5c fb.	Oil Eucalyptus, Austral., 2c tb.	
Oil Orange, West Ind., 10c	tb. Musk Ambrette, \$2 fb.	
Methyl	Salicylate, 3c fb.	

Trend of the Market

	T . 1	Last	Last	Last
	Today	Week	Month	rear
Oil Bergamot	\$5.35	\$5.35	\$5.00	\$6.00
Oil Citronella, Ceylon	.32	.32	.35	.55
Oil Cloves	1.75	1.75	1.50	2.40
Oil Lemon	.75	.75	.70	1.10
Oil Peppermint, Natural	2.00	1.85	2.00	6.25
Oil Sandalwood, E. I	6.50	6.50	6.75	11.00
Oil Sassafras, Artif	.53	.53	.55	.70
Benzaldehyde, U.S.P	1.50	1.50	1.50	1.00
Coumarin	4.50	4.50	4.75	6.50
Methyl Salicylate	.32	.35	.35	.75
Vanillin	.50	.50	.50	.85
Average	2.19	2.18	2.17	3.92

A cautious branching-out in taking on requirements by some consumers occurs simultaneously with a number of upward reactions among the essential oils. During the past week, inquiries for several items which have been neglected for many months past, have been confronted by supplies on the spot at low ebb, with the consequence that subsequent inquiries found holders demanding higher prices. Firmer quotations for several of the staples have also been effective in giving a better tone to the market with a greater display of firmness on the part of most holders. Although the reductions for the week outnumber the actual advances in price, the influence of the products which have moved up, is far more significant than the continuation of minor declines. The market as a whole presents a decidedly brighter appearance and emanates considerably more of optimism than for months past.

The firmer position of peppermint oil makes spot prices for good quality material higher. Sicilian orange oil has shot up while at the same time, offers of West Indian have softened the situation. Lemongrass has reacted upward. Cade is in the same class. Geranium oils are tending to stiffen up. Wormseed oil is higher on reduced offers from the country. Oil bay is cheaper. The market on citronella has become a daily affair. Coriander is easier. Spearmint has been cut again. Another drop in Bourbon vetivert is noted. Sassafras natural is easier. Further concessions are available in petit grain, patchouli, and foreign pennyroyal. Peach kernel oil has softened under competition.

Essential Oils

Oil Almond—Lower priced peach kernel oil is noted on spot. A keen competitive fight for such business as is available has cut prices somewhat. Now named at 28c@32c a pound.

Oil Anise—Technical is not in over-abundant supply on spot. Quoted at 45c@55c a pound as to seller and quantity. U. S. P. at 60c@70c.

Oil Bay—Demand is very quiet and prices are under pressure. Lower on spot at \$2.25@\$2.35 a pound.

Oil Bergamot—Firmly maintained at \$5.35@\$5.50 a pound on the spot although demand is confined to very small proportions. Shipment is still held above the spot market.

Oil Cade—Attempts to buy actual spot supplies revealed little or nothing available and higher prices were demanded. Sales were noted at 65c, later at 75c and 80c a pound.

Oil Camphor—Supplies have been pretty well cleaned out and prices are much firmer. For spot goods in cases, 25c@26c a pound is named.

Oil Cassia—Continued firmness and display of strength with a tendency of prices to rise have been noted in connection with inquiries from one or two large consumers. Technical is strong at 85c today as compared with a bottom some weeks ago of 65c. Some holders demanding $87\frac{1}{2}c$ and 90c a pound. Lead free at \$1.00@ \$1.10. U. S. P. remains steady at \$1.25 up to \$1.40 as to seller and quantity.

Oil Cedar Wood—Cheaper lots of cedar wood are available here at 35c a pound although most of the big essential oil houses are naming 38c unchanged. A good export inquiry was reported from one quarter.

Oil Citronella—The market is a daily affair. Buyers are interested and inquiries are frequent. Sales have been reported at 30c for Ceylon in drums on spot although the openly named figure is uniformly 32c through the trade. Cans at 33c@35c. Generally steady but weakened now and then by some seller letting a lot out under the market. Java oil unchanged at 62c spot.

Oil Cloves—Supplies of clove oil are available on spot still at \$1.75 a pound although American distillers are quoting \$1.85 inside for cans. Another rise in the spice during the past week has further tightened the position of domestic producers of clove oil. Two dollar oil appears practically certain in the near future. Vanillin may reflect this position although European competition, if goods are permitted to be brought in, may offset this.

Oil Coriander—Again cheaper here at \$10.50 a pound spot and \$10.00 c.i.f. Seed on spot very scarce and firm.

Oil Eucalyptus—Openly named at 48c for cases of U. S. P. Australian oil. Large lots down to 45c spot. Demand slow but inquiry giving promise for an early pick-up.

Oil Geranium—Considerable bullish sentiment has developed on both African and Bourbon following cables from primary markets. Both firmer here, although in limited demand, at \$4.25 inside for African and \$3.75 for Bourbon. Turkish inactive.

Oil Hemlock—Further cut to 75c a pound for spot hemlock and spruce oils.

Oil Lemon—Cabled higher from abroad and higher in some quarters here. Stocks can be had on spot at 75c inside however while special brands run from 85c

up to \$1.00 generally. Demand light. Considerable speculation in Sicily at this time.

Oil Lemongrass—Although dealers could not give femongrass away at 75c a week or two ago, the oil has reacted from the low level rising to 85c@90c a pound and is firm thereat. Inquiry better and market tending up.

Oil Orange—A sharp rise in Sicilian orange has followed higher cables and stronger position on spot. Best here is now \$3.00 with most holders asking \$3.25 a pound. On the other hand, numerous offers of West Indian by cable have softened prices of the latter oil to \$2.75. Importers here believe that West Indian operators held on to stocks too long, overplaying the situation, and with new crop coming in, they are forced to sell out.

Oil Patchouli—Cheaper lots available here as to quality and seller at \$8.25@\$9.25 a pound.

Oil Peppermint—Best here for a standard brand natural oil is \$2.00 a pound while no sellers of U. S. P. are noted under \$2.25. The situation on spot and in the country as well is materially firmer. Considerable oil has been reported sold for delivery to big consumers by distillers. It is still possible to buy plenty of natural oil at \$1.85, however, but this is reported low in menthol owing to the peculiar weather conditions affecting the development of the crop this year. Attempts to buy Jap mint oil here show nothing under \$1.15 available.

Oil Petit Grain—Still weak and tending to slide off. Lower this week at \$2.00@\$2.10 a pound for South American.

Oil Sassafras—Natural oil again cheaper here at \$1.00 a pound ranging up to \$1.20 as to seller.

Oil Spearmint—Again lower here on competition and new offers. Quoted at \$3.25 a pound with demand slow.

Oil Vetivert—Lower priced vetivert Bourbon is available here at \$6.00@\$6.50 a pound as to seller.

Oil Wormseed—The reduction of spot supplies and restricted offers from the distilling district has stiffened prices. Lowest on spot is now \$2.50 a pound while most holders are asking \$2.75.

Aromatic Chemicals

Eucalyptol—The continued easy position of the oil for some time past has brought out slightly lower prices for eucalyptol. Now named at 80c@85c a pound spot.

Coumarin—Resale goods weak at \$4.25 a pound spot. Manufacturers at \$4.35@\$4.50. Demand steady but competition keen.

Musk Ambrette—Again lower and very weak at \$19.00 @\$21.00 a pound.

Methyl Salicylate—Has been cut by makers to 32c basis 50 pound cans in line with the reduction in all salicylates.

The lavender distilling plant established by Schimmel & Co., Leipzig, at Barreme, France, about fifteen years ago and which was sequestrated by the French Government during the war, was sold May 31, 1921, to J. Gras, Cannes, France. Mr. Gras is established in the distillation of essential oils, etc., and before the war was manager at Barreme for Schimmel & Co. Fritzsche Brothers, Inc., New York, are agents for the plant in the United States and Canada.

The American Institute of Weights and Measures says the installation of the metric system would cost a selected list of 31 companies \$21,464,688.

The Pensak Drug Co., Scranton, Pa., is said to have sold more than 50,000 leeches last month. They are imported from Sweden, France and Italy.

COST OF IMPORTED VANILLIN

In the bill filed by Morana Incorporated in the Supreme Court of the District of Columbia for a writ of mandamus to compel the Secretary of the Treasury to issue a license for the importation of 1,000 pounds of vanillin, as announced in Drug & CHEMICAL MARKETS last week, the company says:

"Petitioner further says that vanillin cannot be purchased and is not obtainable in the United States on reasonable terms as to quality, price and delivery for the following reasons among others: Petitioner has purchased 1,000 pounds of vanillin in Switzerland, a foreign neutral country at 70 Swiss F. per kilo c.i.f. New York for which at the present rate of exchange the cost is approximately \$5.40 per pound; adding to the cost price the duty of 20% and 1% to cover entry charges and cartage to warehouse, the price to petitioner including duty is brought to \$6.55 per pound or 41 cents per oz. as against 50 cents per oz. as quoted by American manufacturers.

"Petitioner further says that a conservative estimate of the cost to produce vanillin in the United States under present labor conditions and at the present cost of raw materials would be approximately \$4.00 per pound based on the production of 65,000 pounds per annum, which petitioner stands ready to prove. Allowing \$.25 per pound a liberal outlay for selling expenses, the reasonable cost of manufacturing and selling vanillin would be the sum of \$4.25 per pound as against the selling price of \$8.00 per pound. Petitioner further says that in arriving at this estimate the difference in labor costs as between the present and before the War would not cause any appreciable difference in the cost of the production of the vanillin; that in the estimate given the actual labor costs under present conditions, constitute less than 10% of the entire costs after allowing for a salary for the chief chemist and all of the labor, actually engaged in the manufacturing of the product, as well as the bookkeeper, stenographer and other necessary office labor in the plant.

"Petitioner further says that in estimating the actual cost of the production and sale of vanillin and arriving at the figure mentioned it has not adopted any secret process of manufacturing but a process that could be used by any manufacturing concern. The petitioner further says that the quality of vanillin purchased from the concerns indicated by the defendant through the aforementioned F. S. Dickson is unsuited for its purposes.

"Petitioner further says that it is apparent that the selling price of vanillin made in this country is excessive and unreasonable and that should petitioner be denied a permit or license to import vanillin already purchased, as well as other vanillin, of foreign markets at a price greatly less than the market price now prevailing the action of the Secretary of the Treasury would result in protecting the manufacturer of vanillin in America in the maintenance of an unfair price to the great disadvantage of the American public."

TO HOLD A LAVENDER FAIR

The Departmental Agricultural office of the Basses-Alpes and the Syndicate of Producers of Lavender Essences are organizing a sample fair to be opened on October 1, 1921. At this fair will be organized a special congress with the purpose of studying all questions relative to lavender. The fair will take place at Digne (Basses-Alpes), which is the producing center of lavender. All foreign purchasers of lavender are requested to be present and all inquiries relative to this matter should be addressed to M. le Directeur des Services Agricoles, Digne, Basses-Alpes, France.

The Foreign Markets

Imports of Drugs, Chemicals, Dyestuffs, etc., Page 553

GLYCERIN LOWER IN LONDON

Better Demand for Crude Drugs at Auction Sales— Coriander Seed and Saffron Higher—Platinum Advances—Linseed Oil, Turpentine and Resorcin Firmer —Arsenic and Codeine Lower

(Special Cable to DRUG AND CHEMICAL MARKETS)

London, Sept. 14.—The Drug Auctions held last week indicated a much better demand for crude drugs. This week prices have advanced on coriander seed and saffron. Platinum is higher.

Firmer prices are announced for linseed oil, phenacetin, phenazone, resorcin and turpentine.

The market for Japanese refined camphor, citric acid, cocoa butter and cream tartar is easier.

Lower prices are quoted on arsenic, chrysarobin, codeine, glycerin which is £10 lower, and morphine.

London, Sept. 3. (By Mail)—Business continues more active, although as yet not in heavy quantities. The revival of trade must soon be more in evidence. Agar Agar is firmer, at 3s per lb. for No. 1. Kobe, and 2s 9d for No. 2 both on spot. Arsenic is much easier, white Cornish powder being obtainable at £43 per ton delivered London or Liverpool. Bergamot Oil is firmer and rather scarce at 25s per lb. on spot. Cassia Oil is higher at 4s 6d to 4s 9d per lb. for 80 to 85 per cent on spot. Castor Oil has been reduced by £4 per ton, pharmaceutical being now £60, first pressing £55, and second pressing £45 per ton naked, ex mills Hull. Citronella Oil is higher at 1s 6d per lb. on spot for Ceylon and 2s 9d per lb. for Java.

Cocoa Butter is lower at 1s 10d per lb. for ton lots prime English, ex works. Farina is higher at 31s per cwt. for Japanese and 27s 6d for Dutch.

Linseed Oil has been unsettled, but closes only a little lower at 38s per cwt. on spot.

Menthol is somewhat easier on spot at 23s per lb. for Kobayashi and/or Suzuki. Oxalic Acid is weaker and is offered here as low as 8½d per lb. Phenacetin is much firmer and is now quoted at from 5s 9d to 6s per lb.

Platinum has been in good demand, the raw metal being now £17 per oz., being firmer.

Salicylates are firmer at 1s 3d to 1s 6d per lb. for Acid, and 2s 2d to 2s 4d for the soda salt. Salol is lower at 2s 6d to 2s 8d per lb. Star Anise Oil is easier at 2s 4d per lb. for "Red Ship" brand on spot.

Turpentine has again been dropping and closes at 64s per cwt. for American on spot.

Rumors in Berlin that the Chemische Fabrik Buckan, A. G. in Magdeburg was to be merged with the German Solvay Works in Bernburg sent the company's stock from 40 per cent to 600 per cent on the Stock Exchange in one day. Among other stocks that soared were the shares of the Chemische Fabrik v. Heyden A. G., on rumors that the company was to be absorbed by the aniline group.

Canadian chemical exports in 1919 are valued at \$17,-053,074 compared with \$1,677,216 in 1912. Imports of chemicals grew during the same period from \$12,595,851 to \$32,788,704.

Dr. Stanwood, of Los Angeles, reports a discovery of graphite near Salvous, on the Sweena River, British Columbia. He says the ledge is 1,500 ft. wide and six miles long.

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France (franc) .								-												 			15	13	.07
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Japan (yen)																									.48
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Norway (crown)																									.13
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Russia-(100 ruble																									.17

CANADA'S LINSEED OIL OUTPUT \$5,500,000

There were twenty-four plants engaged in the manufacturing or refining of vegetable and animal oils in Canada in 1918. Seven of these produced over 75% of the total output says S. J. Cook, chief of the Mining, Metallurgical and Chemical Division of the Dominion Bureau of Statistics. The working capital invested in these seven plants amounted to \$2,428,991, of which land, buildings, machinery and tools were valued at \$1,162,247; cash, trading and operating accounts and bills receivable amounted to \$364,411; and the remainder, \$902,333 was the value of finished products on hand, stocks in process, materials, fuel and miscellaneous supplies on hand at the end of the year.

These seven plants used 1,360,732 bushels of flaxseed for which they paid \$4,634,669 and from which they produced 2,144,120 gallons of crude linseed oil, worth \$2,936,838; 738,091 gallons of refined linseed oil valued at \$1,126,490; and 24,366 tons of oil cake, having a selling value, f.o.b. producing plant, of \$1,374,437. Canada's production of linseed oil and oil cake in 1918 amounted to nearly five and one-half million dollars in value and yet only 34% of the four million bushels of flaxseed consumed in Canada in that year was used in the production of linseed oil.

The total yield of flaxseed in Canada in 1918 was 6,055,200 bushels. The sum of the Canadian production and the quantity imported, (13,067 bushels), less the quantity exported, (2,088,366 bushels) shows that the approximate consumption of flaxseed in Canada during the year was 3,979,901 bushels. The quantity used in the production of oil was 1,360,732 bushels.

Owing to the greater facilities for the supply of coal, the Bosnian Electricity Joint Stock Company are now preparing, at their works at Bruckl near Klagenfurt, to supply the entire demand of German-Austria in caustic soda, so that further purchases from foreign sources will, it is hoped, no longer be necessary. The works are also to be increased so as to permit of a considerable increase in production.

Japan's annual consumption of rosin in 1918 and 1919 was not more than 30,000 barrels, including 10,000 barrels for paper making, 10,000 barrels for soap making and 5,000 barrels for the manufacture of yellow phosphorus matches. For the twelve months ended April 30, 1920, 100,000 barrels of rosin were imported.

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COMPETITION HURTS BRITISH CHEMICALS

Compiled by the Secretary of the British Chemical Trade Association London, Sept. 3.—Business is strictly limited to small orders, both for home and export trade, which are being placed at generally cut prices with weak holders. a large number of instances prices are governed by offers from the continent at figures which have put the home maker out of the market for the time being. The few alterations this week still show a tendency towards lower prices with the market continuing quietly. Alum, lump in bags, continues to be quoted at very low figures from the continent. Home makers price is at about £17 per ton. Demand still poor. Barium chloride (98-100%) is offering on the spot at about £16 to £17 per ton, but there appear to be no buyers. Continental material is offered at much lower figures. Lithopone is much firmer this week and a fair demand has been experienced. 30% Continental Red Seal remains steady at about £26@ £27 per ton. Light Resisting at about £33 and Green Seal at about £35.

Potassium prussiate remains steady at makers reduced prices of 1s 2d for yellow and 2s per lb. for red. Spot lots also at about these figures. Bicarbonate of soda is cheaper this week for parcels on the spot, limited lots at £11 per ton upwards. The demand is quieter. General quotations are round about £12 per ton for good new stuff.

Sodium caustic is now offering on the spot, 70-72%, at £22 10s and 76-77% at £24 to £24 10s f.o.b. in drums

BRITISH COAL-TAR PRODUCTS STEADIER

London, Sept. 3.—The recent slight improvement in the market for coal-tar products and intermediates is being fairly well maintained. Moderate business is steadily passing and values are steadier and unchanged from last week.

Nine-tenths of the magnesite produced in Austria is exported. While before the war the United States was the principal market for Austrian magnesite, the greater part of the export now goes to Germany. In 1920 the exported raw magnesite amounted to 99,710 metric quintals (1 metric quintal equals 220.4 pounds). of these 74,417 went to Germany, 12,448 to France, 480 to Italy, 146 to Sweden, 7,343 to Switzerland, 1,071 to Jugoslavia and 3,794 to Czechoslovakia. The export of burned mangesite amounted to 525,596 quintals of which quantity Germany also got the greater part, receiving 216,174 quintals. It is reported that the Veitsch magnesite works and the Kraubarth works have been merged.

An official report of exports from British East Africa for the year, just issued, states that carbonate of soda is third in importance in the list of exports, 240,133 cwt., valued at £269,258, having been shipped during the year, as compared with 93,755 cwt., valued at £111,322, shipped during the previous year. Sixty-three per cent was consigned to British possessions and the remainder to foreign countries. Practically the whole of this product is obtained from the natural deposits of soda at Lake Magadi.

During the war British geologists discovered exceptional quantities of radium in fragments of colcobite sold in London by a Belgian coming from the Belgian Congo. Efforts to trace the former owner of the specimens failed, and the exact spot where the mineral had been found was not determined. It is stated that radium has now been discovered in the Belgian Congo, and that a special mission will be sent to investigate the importance of the discovery.

WHY WAR PRICES FOR DYES WERE HIGH

The Standing Committee on Trusts in the British Parliament, which investigated conditions in the dye industry of Great Britain, found the principal causes for the rise in prices of dyes to be the higher cost of raw materials and of manufacturing intermediate products, the increased cost of fuel and labor, and the greater outlay of capital required for the erection and upkeep of plants. The cost of manufacturing intermediates is designated as one of the most potent factors in the increase.

Before the war British industries were producing onetenth of the national consumption, the remaining ninetenths being imported, principally from Germany. The intermediate products required by the British industries were purchased from Germany at cost price, and sometimes below cost; and as a natural result British manufacture of these ceased. When the manufacture was begun again, the expense was much greater.

The increased cost of raw materials is also found to be a strong factor in the advancing of prices. The following table shows the pre-war prices of the raw products used, as well as the prices paid in April, 1921, and the percentage of increase between the two price levels:

Materials		t pr	ar		ice 1. 19		In-
	L.	s.	d.	L.	8.	d.	Per
Anthracene, 40 per centcwt		6	8	1	16	8	450
Naphthaleneton	9	15	0	20	10	0	116
Muriatic acidcarboy	-	1	1	200	7		
Bichromate of sodapound			3		,	71/2	156
Soda ashton		5	Ö	7	6	9	126
Double oil of vitrioldo	3	10	ŏ	9	0	0	157
Caustic sodado		7	10	24	10	0	83
Brown oil of vitrio!do		8	0	4	15	0	98
Oleumdo		10	0	10	15	0	207
Saltdo		12	4	3	2	10	469
Limedo		15	o	2	15	6	270
Crude naphthagallon		0	61/2	-	3	1154	
Methyl alcoholdo		2	10		7	10	176
Nitrate of sodaton		10	0	21	15	0	107
Nitrite of sodado		0	0	47	10	0	90
Sulfite of soda concentratesdo		15	0	31	0	0	300

Between July, 1914, and April, 1921, coal rose from 10s 8d to 38s 8d per ton, an advance of 245 per cent. Wages paid labor in July, 1914, were at a mean of 5½d per hour, as compared with 1s 7d per hour in July, 1920. In May, 1921, wages paid labor were still 209 per cent of those paid in July, 1914. The necessity of erecting new plants and of equipping these with the requisite machinery at greatly advanced prices also added to the cost.

DYES CONSUMED BY CHINA

Washington, D. C., Sept. 14.—The Department of Commerce is in receipt of reports relative to the consumption of dyes and colors, in China. The following figures show the returns of China's purchases of dyes, colors, and paints for the years 1919 and 1920.

colors, and paints for the	years 1717 an	1720.
	1919	1920
Ha	ikwan Taels	Haikwan Taels
Aniline	3,042,917	7,730,291
Mangrove Bark	351,721	238,474
Cinnabar	267,189	178,128
Artificial indigo		15,306,474
Vegetable indigo	637,116	470,520
Sapanwood	224,065	231,614
Vermillion	256,207	269,658
Unclassed dyes and colors	1,247,200	1,427,868
Paints and paint oil	1,794,723	1,968,627

Japan exported sulfuric acid valued at yen 7,344,871 in 1920. The amount is estimated at kin 706,244,000. Shipments were made to China for use in the chemical industries being developed there. In 1916 Japan exported kin 1,517,617,000, valued at yen 25,008,955. Russia took large amounts.

Prices Current of Fine and Heavy Chemicals, Drugs, Essential Oils, Dyestuffs and Oils

EXPLANATION

Prices current quoted herein are spot New York, unless otherwise indicated, for goods in large quantities in original packages of the customary trading unit of weight or measure. Re-sale prices are quoted when second-hands are a factor in the market.

The price range (two sets of figures, e. g., .16-.19) indicates either prices for different quantity orders, or else that different manufacturers or importers quote different prices. All price ranges are inclusive.

All quotations are made on the basis of avoirdupois pounds and ounces or American gallons. For the ready reference of exporters and foreign buyers the following tables of equivalents are published:

WEIGHTS AND MEASURES

1 Imperial Gallon (Brit.)—1.20 Amer. Gallons
1 American Gallon—833 Imperial Gallon
1 American Gallon—3.79 liters
1 Liter—264 American Gallon
1 American Gallon (H₂O) weighs 8.35 pounds
1 Pound (Avoirdupois) weighs 454 Kilogram
1 Kilogram weighs 2.20 pounds (Avoirdupois)

Acids

And S. Ham Charles			
Acetic, See Heavy Chemicals			60
Acetyl-salicylicb.	.55	=	.00
Benzoic, U.S.Pb.	193	_	14
Boric cryst., bblstb. Powdered, bblstb.	122	3	14
Butvric Tech., 98 p.ctb.	.129	4-	.90
	4.27	-	1.50
Carbolic cryst., U.S.P., drs.tb.	10	_	16
1-lb. bottle	_	_	27
5.1h hottle th	_	-	.23
50 to 110-lb. tlns	design	-	.19
Liquid, U.S.P., 1 1b. bot fb.	-		.26
Crude, 25 p.cgal.	.30	_	.35
Chromic. 98 p.ctb.	-	_	.45
Chrysophanicth.	1.70	- 1	.90
Chrysophanic	als		
Citric, crystals, bbls	_	_	.47
Powderedtb. Imported, kegstb.			
Imported, kegs	.40	-	.40
Cresylic, 95-100 p.c., See Coal-ta	ir Cr	udes	10
Formic, 75 p.c., tech	.15	-	-10
Classics U.S.P., Dulk	1.65	=	75
Hadachasania 40 n.c. piece	1.03	_ ′	40
Hydrobromic, 40 p.c., pureib.	00		.70
Hydrochloric, C.P., carboyslb.	.07	_	.08
Hydriodic, sp. g. 1.150oz.	na la	_	.20
Hydronuoric, see Heavy Chemic	1.65	_ 1	70
U.S.P., 10 p.ctb.	1.03	_ '	.37
Lactic. U.S.P., VIII	55	_	60
HCD IV	65	_	.70
Molybdie CP	.00	- 2	1.00
Muriatic, see Heavy Chemicals			
Muriatic, see neavy Chemicals			
Nitric, see Heavy Chemicals Nitro Muriatic	20	-	23
Oxalic, cryst., bblsb.	.15	_	.16
Picric, kegs, see Intermediates	120		
Phoenhoric, 85-88p.c., syr. U.S. Ptb.	.22	_	.24
7A 4b	.12	-	.17
Pyrogallic, resublimated lb.	_	- 1	1.75
Pyrogallic, resublimatedtb. Crystals, bottlestb. Salicylic, U.S.Ptb.	_	- 1	.35
Salicylic, U.S.Ptb.	.22	-	.25
		-	.19
Sulfuric, C.P		_	.08
Sulfurous (6-7 p.c.)	.05		.06
Sulfuric, C.P	.75		.85
Partaric, Crystais, U.S.PIb.	-	_	.35
Imported II S.P. Cryst	.27	_	.28
Powdered, U.S.P	.28	-	.30
			-

Fine Chemicals

Acetanllid, C.P., bbl. blktb. Acetone, C. Ptb. Acetphenetidintb. Adeps Lanae, See Lanolin Albumen, Egg, edibletb. Alcohol, 190 proof, U.S.Pgal. Cologne Spirit, 190 proof,gal. Second Hands, U.S.P.	.29 -	33
Acetone, C. P	1.35	1.65
Adeps Lanae, See Lanolin	1.00	
Albumen, Egg, edible		4.70
Cologne Spirit 190 proof gal		4.75
Second Hands, U.S.P. gal.		4.66
For Export, U.S.Pgal.	.45 —	.74
97 n.c	.70 —	.75
Puregal.	1.00 -	75 - 1.20
Puregal. Second Hands, 95-97 p.c.gal. Denatured Completegal. Aloin, U.S.P., powdtb.	.65 -	.67
Aloin, U.S.P., powdtb.	.93 —	.95
	4.75 -	- 5.25
Ammonium, Acetate, crysttb. Benzoate, cryst., U.S.Ptb. Bichromate, C. Ptb. Bromide, gran, bulktb. Importedtb.	.37 —	.40 - 1.00
Bichromate, C. Pb.	.65 —	.70
Bromide, gran., bulktb.	_	
Cash Dom IISP kees th	.13 —	.20
Carb. Dom., U.S.P., kegs. tb. Chloride, U.S.P	.19 —	.20
Hypophosphiteb.	1.35 —	1.40
Introduce (as to brand)ID.	1.00 —	- 3.00 - 4.30
Nitrate, C. Pb.	= -	.40
Oxalate, Pureb.	.45 —	.55
Monobasic	.18 -	20
Salicylate, U.S.P	.60 —	.65
Amyl Acetate bulk driver and	2.15 -	2,25
Ichthyolate (as to brand). tb. Lodide tb. Nitrate, C. P tb. Oxalate, Pure tb. Oxalate, Pure tb. Monobasic tb. Salicylate, U.S.P tb. Water, (See Heavy Chemicals) Antyl Acetate, bulk, drums,gal. Antimony Chlor. (Sol. butter of Antimony) tb. Needle Powder tb. Antipyrine, bulk tb. Apomorphine Hydrochlor. ½5.02.	2.10 -	2,23
Antimony)	000	.12
Antipyrine, bulk	2.15	2.25
Antipyrine, bulktb. Apomorphine Hydrochlor. 1/28.oz.	-	12.05
Arecoline Hydrobromideoz.	9.00 -	10.00
Argols, red	.07 —	.08
White, See Heavy Chemicals	15	
Arsenous Iodide, U.S.P ib.		5.50
		0.00
Asplrintb.	.55 -	.60
Aspirin	9.00 -	60
Aspirin	9.00 — 6.00 —	60 -12.00 - 6.20 95
Aspirin	9.00 — 6.00 —	60 -12.00 - 6.20 95 25
Asplrin	9.00 — 6.00 — — — .20 —	60 -12.00 - 6.20 95 25 24 - 5.38
Asplrin	9.00 — 9.00 — 6.00 — 20 —	60 -12.00 - 6.20 95 25
Asplrin	9.00 — 9.00 — 6.00 — 20 —	
Asplrin	.55 — 9.00 — 6.00 — .20 — .08 — 3.30 — 3.60 —	60 -12.00 - 6.20 95 25 24 - 5.38
Asplrin	.55 — 9.00 — 6.00 — .20 — .08 — 3.30 — 3.60 —	
Asplrin b. Atropine, Alk. U.S.P., 1-oz.v.oz. Sulfate, U.S.P., 1-oz. voz. Barbital	.55 — 9.00 — 6.00 — .20 — .08 — 3.30 — 3.60 —	
Asplrin thousand the control of the	.55 — 9.00 — 6.00 — .20 — .08 — 3.30 — 3.60 —	.60 -12.00 -6.20 95 25 24 -5.38 16 -3.75 -3.75 -2.75 -22.50
Asplrin thousand the control of the	.55 — 9.00 — 6.00 — .20 — .08 — 3.30 — 3.60 —	60 -12.00 - 6.20 95 25 24 - 5.38 16 - 3.75 - 3.75 - 2.75 - 22.50 - 27.00 - 1.70
Asplrin b. Atropine, Alk. U.S.P., 1-oz.v.oz. Sulfate, U.S.P., 1-oz. v. oz. Barbital	.55 — 9.00 — 6.00 — .20 — .08 — .08 — .08 — micals) 2.65 — .	
Asplrin b. Atropine, Alk. U.S.P., 1-oz.v.oz. Sulfate, U.S.P., 1-oz. v. oz. Barbital	.55 — 9.00 — 6.00 — .20 — .08 — .08 — .08 — micals) 2.65 — .	.60 12.00 .6.20 .95 .24 5.38 .16 3.75 3.75 22.50 25.00 27.00 5.00
Asplrin thousand the control of the	.55 — 9.00 — 6.00 — .20 — .08 — .08 — .08 — micals) 2.65 — .	.60 12.00 .6.20 .95 .24 5.38 .16 3.75 3.75 22.50 25.00 27.00 5.00
Asplrin h. Asplrin h. Asplrin h. Asplrin h. Atropine, Alk. U.S.P., 1-0z. v. oz. Sulfate, U.S.P., 1-0z. v. oz. Sarbital oz oz h. Asplrin h. Asplrin h. Dioxide h. Diox	.55 — 9.00 — 6.00 — .20 — .08 — .08 — .08 — micals) 2.65 — .	.6.20 .12.00 .6.20 .95 .24 .5.38 .16 .3.75 .3.75 .2.75 .2.75 .22.50 .27.00 .1.70 .2.10 .2.10 .2.10
Asplrin	.55 — 9.00 — 6.00 — .20 — .08 — .08 — .08 — micals) 2.65 — .	.6.20 .12.00 .6.20 .95 .24 .5.38 .16 .3.75 .3.75 .2.75 .2.75 .22.50 .27.00 .1.70 .2.10 .2.10 .2.10
Asplrin b. Asplrin b. Atropine, Alk. U.S.P., 1-oz.v.oz. Sulfate, U.S.P., 1-oz. v. oz. Barbital	.55 — 9.00 — 6.00 — .20 — .08 — .08 — .08 — micals) 2.65 — .	.60 12.00 .12.00 .6.20 .95 .24 .5.38 .16 .3.75 .2.75 .22.50 .25.00 .1.70 .5.00 .1.40 .2.10 .2.30 .1.45 .2.10 .2.30
Asplrin b. Asplrin b. Atropine, Alk. U.S.P., 1-oz.v.oz. Sulfate, U.S.P., 1-oz. v. oz. Barbital	.55 — 9.00 —	.60 12.00 12.00 .6.20 .95 .24 5.38 3.75 3.75 22.50 25.00 1.70 5.00 1.70 2.30 2.10 2.30 2.10 2.30 2.10 2.30 2.10 2.30 2.10 2.30 2.10 2.30 2.30 2.30 2.30 2.30 2.30 2.30 2.3
Asplrin	.55 — 9.00 — 6.00 — .20 — .20 — .3.60 — .3.60 — .3.60 — .1.55 —	.60 .12.00 .12.00 .12.00 .25 .24 .3.75 .16 .3.75 .2.75 .2.25.00 .27.00 .1.70 .2.10 .2.10 .2.10 .3.85 .2.10 .3.85 .3.85
Asplrin	.55 — 9.00 — 6.00 — .20 — .20 — .3.60 — .3.60 — .1.55 —	.60 12.00 6.20 .95 .25 .24 5.38 5.38 5.37 3.75 22.70 22.50 22.50 22.50 22.00 1.70 2.10 2.10 2.65 2.10 2.65 2.10 2.65 2.10 2.65 2.10 2.65 2.10 2.65 2.10 2.10 2.10 2.10 2.10 2.10 2.10 2.10
Asplrin	.55 — 9.00 —	.60 12.00 6.20 .95 .25 .24 5.38 5.38 5.37 3.75 22.70 22.50 22.50 22.50 22.00 1.70 2.10 2.10 2.65 2.10 2.65 2.10 2.65 2.10 2.65 2.10 2.65 2.10 2.65 2.10 2.10 2.10 2.10 2.10 2.10 2.10 2.10
Asplrin	.55 — 9.00 —	.60 .12.00 .12.00 .12.00 .25 .24 .3.75 .16 .3.75 .2.75 .2.25.00 .27.00 .1.70 .2.10 .2.10 .2.10 .3.85 .2.10 .3.85 .3.85
Asplrin h. Asplrin h. Artopine, Alk. U.S.P., 1-oz.voz. Sulfate, U.S.P., 1-oz.voz. Sulfate, U.S.P., 1-oz. v. oz. Barbital oz. oz Barbital oz. oz. Barbital oz.	.55 — 9.00 —	.60 6.20 6.20 95 25 25 4 5.38 .16 3.75 2.75 22.50 27.00 27.00 27.00 2.10 2.10 2.10 2.10 2.10 2.10 2.10 2
Asplrin h. Asplrin h. Artopine, Alk. U.S.P., 1-oz.voz. Sulfate, U.S.P., 1-oz. voz. Sulfate, U.S.P., 1-oz. v. oz. Barbital oz. oz. Barbital h. Oz. Oz. Barbital h. Dioxide h. h. Ioddle h. h. Ioddle h. h. Bay Rum Denatured Salicy, Acid. gal. Denatured, quinine gal. Benzaldehyde (see Aromatic Che Bensonaphthol h. Berberine Hdchl. h. Berberine Hdchl. h. Acid Sulfate h. h. Neutral sulfate h. B. Bismuth Metallic h. Ammon. Citrate, U.S.P. h. Oxychloride h. Subcarbonate h. Subnitate h. Subnita	.55 — 9.00 —	
Asplrin h. Asplrin h. Asplrin h. Atropine, Alk. U.S.P., 1-oz.voz. Sulfate, U.S.P., 1-oz.voz. Sulfate, U.S.P., 1-oz.voz. Sulfate, U.S.P., 1-oz. v. oz. Barbital oz. oz. Barbital oz. oz. Barbital oz. oz. Barbital oz. oz. Barbital h. Oz. Dioxide h. h. Ioddle h. h. Bay Rum Denatured Salicy, Acid. gal. Denatured Salicy, Acid. gal. Denatured Salicy, Acid. gal. Denatured Salicy, Acid. gal. Denatured h. Berberine Hdchl. h. Berberine Hdchl. h. Acid Sulfate h. h. Neutral sulfate h. h. Neutral sulfate h. h. Neutral sulfate h. h. Neutral sulfate h. D. Neutral sulfate h. S.P. h. Oxychloride h. Salicylate h. Subcarbonate. U.S.P. h. Subpallate h. Subcarbonate. U.S.P. h. Subpallate h. Suboiddle h. Subnitrate h. Subnitrate h. Second Hands h. Subnitrate h. Second Hands h. Tannate h. Borax, in bbls. h. h. U.S.P., Kegs h. Bromides, See Potass. Brom. et Bromine, purified h. Brucine Sulfate oza dmium Bromidec crystals. h.	.55	.60 6.20 6.20 .25 .24 .5.38 .3.75 .3.75 .3.75 .2.75 .3.75 .2.75 .2.75 .2.10 .2.10 .2.21 .2
Asplrin Atropine, Alk. U.S.P., 1-oz.v.oz. Sulfate, U.S.P., 1-oz. v. oz. Sarbital oz. Barbital oz. Bioxide b. Bioxide b. Bioxide b. Bay Rum Denatured Salicy. Acid gal Benzaldehyde (see Aromate Che Benzonaphthol b. Berberine Hdehl b. Acid Sulfate b. Neutral sulfate b. Neutral sulfate b. Neutral sulfate b. Bismuth Metallic b. Ammon. Citrate, U.S.P. b. Citrate, U.S.P. b. Citrate, U.S.P. b. Citrate, U.S.P. b. Subbenzoate b. Subbenzoate b. Subbenzoate b. Subsalicylate b. Subodide b. Subodide b. Subodide b. Subodide b. Subosicylate b. Bromices, See Potass. Brom, et Bromine, purified b. Bromices, See Potass. Brom. Torlidum Bromide, crystals. b.	.55 — 9.00 —	.60 6.20 6.20 .95 .25 .24 5.38 .16 5.38 .75 3.75 2.75 22.50 2.75 22.50 2.75 22.50 2.75 22.50 2.75 2.75 2.75 2.75 2.75 2.75 2.75 2.75
Asplrin Atropine, Alk. U.S.P., 1-oz.v.oz. Sulfate, U.S.P., 1-oz. v. oz. Sarbital oz. Barbital oz. Bioxide b. Bioxide b. Bioxide b. Bay Rum Denatured Salicy. Acid gal Benzaldehyde (see Aromate Che Benzonaphthol b. Berberine Hdehl b. Acid Sulfate b. Neutral sulfate b. Neutral sulfate b. Neutral sulfate b. Bismuth Metallic b. Ammon. Citrate, U.S.P. b. Citrate, U.S.P. b. Citrate, U.S.P. b. Citrate, U.S.P. b. Subbenzoate b. Subbenzoate b. Subbenzoate b. Subsalicylate b. Subodide b. Subodide b. Subodide b. Subodide b. Subosicylate b. Bromices, See Potass. Brom, et Bromine, purified b. Bromices, See Potass. Brom. Torlidum Bromide, crystals. b.	.55	.60 6.20 6.20 .95 .25 .24 .5.38 .3.75 .3.75 .3.75 .2.7
Asplrin Atropine, Alk. U.S.P., 1-oz.v.oz. Sulfate, U.S.P., 1-oz. v. oz. Sarbital oz. Barbital oz. Bioxide bb. Bioxide bb. Bioxide bb. Bay Rum Denatured Salicy. Acid gal. Benzaldehyde (see Aromatic Che Benzonaphthol bb. Berberine Hdehl bb. Acid Sulfate bb. Neutral sulfate bb. Neutral sulfate bb. Neutral sulfate bb. Bismuth Metallic bb. Ammon. Citrate, U.S.P. bc. Citrate, U.S.P bb. Citrate, U.S.P bb. Subbenzoate bb. Subbenzoate bb. Subcarbonate. U.S.P bb. Subsalicylate bb. Suboalide bb. Subnitrate bb. Suboalide bb. Subnitrate bb. Suboalicylate bb. Tannate bb. Bromides, See Potass. Brom. et Bromine, purified bb. Bromides see Potass. Brom. et Bromies Sulfate bb. Bromides purified bb. Bromides bc. Bright bb. Bright bb. Bright bb. Laffeine alkaloid, bulk b. Imported bb.	.55	.60 6.20 6.20 .25 .24 .5.38 .3.75 .3.75 .3.75 .3.75 .2.75 .2.10 .2.25 .20 .20 .20 .20 .20 .20 .20 .20 .20 .20
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Asplrin Atropine, Alk. U.S.P., 1-oz.v.oz. Sulfate, U.S.P., 1-oz. v. oz. Sarbital oz. Barbital oz. Bioxide bb. Bioxide bb. Bioxide bb. Bay Rum Denatured Salicy. Acid gal. Benzaldehyde (see Aromatic Che Benzonaphthol bb. Berberine Hdehl bb. Acid Sulfate bb. Neutral sulfate bb. Neutral sulfate bb. Neutral sulfate bb. Bismuth Metallic bb. Ammon. Citrate, U.S.P. bc. Citrate, U.S.P bb. Citrate, U.S.P bb. Subbenzoate bb. Subbenzoate bb. Subcarbonate. U.S.P bb. Subsalicylate bb. Suboalide bb. Subnitrate bb. Suboalide bb. Subnitrate bb. Suboalicylate bb. Tannate bb. Bromides, See Potass. Brom. et Bromine, purified bb. Bromides see Potass. Brom. et Bromies Sulfate bb. Bromides purified bb. Bromides bc. Bright bb. Bright bb. Bright bb. Laffeine alkaloid, bulk b. Imported bb.	.55	.60 6.20 6.20 .25 .24 .5.38 .3.75 .3.75 .3.75 .3.75 .2.75 .2.10 .2.25 .20 .20 .20 .20 .20 .20 .20 .20 .20 .20
Asplrin Atropine, Alk. U.S.P., 1-oz.v.oz. Sulfate, U.S.P., 1-oz. v. oz. Sarbital oz. Barbital oz. Bioxide bb. Bioxide bb. Bioxide bb. Bay Rum Denatured Salicy. Acid gal. Benzaldehyde (see Aromatic Che Benzonaphthol bb. Berberine Hdehl bb. Acid Sulfate bb. Neutral sulfate bb. Neutral sulfate bb. Neutral sulfate bb. Bismuth Metallic bb. Ammon. Citrate, U.S.P. bc. Citrate, U.S.P bb. Citrate, U.S.P bb. Subbenzoate bb. Subbenzoate bb. Subcarbonate. U.S.P bb. Subsalicylate bb. Suboalide bb. Subnitrate bb. Suboalide bb. Subnitrate bb. Suboalicylate bb. Tannate bb. Bromides, See Potass. Brom. et Bromine, purified bb. Bromides see Potass. Brom. et Bromies Sulfate bb. Bromides purified bb. Bromides bc. Bright bb. Bright bb. Bright bb. Laffeine alkaloid, bulk b. Imported bb.	.556.00	
Asplrin Atropine, Alk. U.S.P., 1-oz.v.oz. Sulfate, U.S.P., 1-oz.v.oz. Barium Carb. prec., pure hb. Dioxide hb. Iodide hb. Nitrate hb. Bay Rum Denatured Salicy. Acid. gal. Denatured, quinine gal. Benzaldehyde (see Aromatic Che Benzonaphthol hb. Berberine Hdehl. hb. Acid Sulfate hb. Neutral sulfate hb. Neutral sulfate hb. Neutral sulfate hb. Ammon. Citrate, U.S.P. hb. Citrate, U.S.P. hb. Citrate, U.S.P. hb. Subcarbonate U.S.P. hb. Subcarbonate U.S.P. hb. Subcarbonate hb. Subcarbonate hb. Suboarbonate hb. Suboarbonate hb. Suboarbonate hb. Suboarbonate hb. Subnitiate hb. Subnitiate hb. Subnitiate hb. Subnitiate hb. Tannate hb. Bromoform hb. Bromoform hbrucine Sulfate oz. Cadmium Bromide, crystals hb. Iodide hb. Hydrochloride hb. Hydrobromide hb. Hydrobromide hb. Caffeine alkaloid, bulk. h. Caffeine alkaloid, bulk. h. Caffeine alkaloid, bulk. hb. Calclum Glycerophosphate hb.	.55	.60 6.20 6.20 .25 .24 5.3.8 .16 5.3.8 3.75 3.75 2.75 2.25 2.20 2.25 2.25 2.20 2.20 2.20 2.2
Asplrin Atropine, Alk. U.S.P., 1-oz.v.oz. Sulfate, U.S.P., 1-oz.v.oz. Barium Carb. prec., pure hb. Dioxide hb. Lodde hb. Nitrate hb. Nitrate hb. Bay Rum Denatured Salicy. Acid. gal. Denatured, quinine gal. Benzaldehyde (see Aromatic Che Benzonaphthol hb. Berberine Hdehl. hb. Acid Sulfate hb. Neutral sulfate hb. Neutral sulfate hb. Silsmuth Metallic hb. Ammon. Citrate, U.S.P. hb. Citrate, U.S.P. hb. Citrate, U.S.P. hb. Subcarbonate U.S.P. hb. Subcarbonate U.S.P. hb. For X-ray Diagnosis hb. Suboarbonate hb. Suboarbonate hb. Suboarbonate hb. Suboarbonate hb. Suboarbonate hb. Suboarbonate hb. Subnitiste hb. Subnitiste hb. Subnitiste hb. Tannate hb. Borax. in bbls. hb. Toromides, See Potass. Brom. et Fromilee, purified hb. Bromoform hb. Bromoform hb. Bromoform hb. Bromoform brucine Sulfate cz. Cadmium Bromide, crystals hb. Caffeine alkaloid, bulk. h. Caffeine alkaloid, bulk. h. Caffeine alkaloid, bulk. hb. Caffeine alkaloid. bb. Hypophosphite hb. Hodoide	.55	.60 6.20 6.20 .25 .24 .5.38 .16 .5.38 .75 .3.75 .2.75 .2.75 .2.25 .2.75 .2.25 .2.75 .2.10 .2.25 .2.10 .2.25 .2.10 .2.25 .25
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CLASSIFICATION

Items are classified into divisions based upon industrial and trade use and, within these divisions, are arranged alphabetically. The order follows roughly the order of the market reports in the text pages and the running heads at the top of the page serve as a ready index.

Fine Chemicals — medicinal, photographic, CP reagent acids and chemicals, except synthetic aromatics.

Heavy Chemicals — industrial and metallurgical acids and chemicals, except metals, dyestuffs, tanning materials and fertilizers.

Coal-Tar Products—crudes and intermediates.

Oils—the fatty oils of animal, fish, and vegetable origin.

Crude Drugs—the natural botanical products sold through the drug trade, further subdivided according to class.

Essential Oils — include the oleoresins and are followed by the synthetic aromatic chemicals.

month aromatic entimetals.			-
Camphor, Am. ref'd bbls.blk.tb.	_	-	.75
16's in 1-1b, cartontb.	_	_	20
24's in 1-lb. cartonlb. 32's in 1-lb. cartonlb.			
32's in 1-lb. carton		=	.84
Japan refined, 2½ lb. slabs.tb.	_	_	.70
Chinese crudetb.	.38	=	.42
	_	_	.68
Monobromated, bulktb.	1.60	_	1.75
Caramelgal.	.60	_	.70
Monobromated, bulk	1.60	-	4.75
Casein, Edibleb.	35	_	.40
Technical	.14		
Castor Oil, AA bbls			.12
Cerium Oxalatetb. Chalk, Precip., lighttb.	.45	_	.48 .04 .03½ .03 .05
Chalk, Precip., light	.033	2-	.04
Heavyb.	-	-	.031/2
Droptb.	-	_	.03
Charcoal, Powdb.	.04	-	.05
Willow, Powd	.06	_	.07
Bone Black, Powd	_	_	.08
Charcoal, Powd. bb. Willow, Powd. bb. Willow, Powd. bb. Bone Black, Powd. bb. Chloral Hvdrate. l' S P. crys tals, 25 lb. jars, 100 lb. lotsb. Chloroform. U.S.P. bb. Second Hands bb. Cinchonidin All crystals bb.			-
Chlassian III. Jars, 100 ID. lotsib.	_	_	.76
Second Wands	.36	-	.43
Cinchenidia Alla senatala	.36	_	.38
Chenomium, Aik., Crystaisoz.		_	.93
Cinchonidin, Alk., crystalsoz. Sulfate	.52		.00
Sulfate	-	Ξ	20
Cocaine, Hydrochl., Crystoz.	_	_	5.00
Sulfate		_	6.95
Importedoz.			c 00
Cocoa Butter, bulktb.	_	=	25
Fingers, cases th	331	/	35
Codeine, Alk., 10 oz. bulkoz.		-	6 10
Fingers, casestb. Codeine, Alk., 10 oz. bulkoz. Hydrobromideoz.	_	_	4.90
Hydrochlorideoz.	_	-	5.50
Nitrate	_	=	5.50
Phosphateoz.	_	_	4.55
Salicylateoz.	-	-	4.55
Sulfateoz.	-	_	4.90
Cod Liver Oil, Newf'd bbl.	15.00	-1	6.00
Norwegianbbl.	15.00	-1	8.00
Phosphate Oz. Salicylate Oz. Sulfate Oz. Sulfate Oz. Cod Llver Oil, Newf'dbbl. Norwegian bbl. Collodion, U.S.P. bb. Corn Syrup 100 fbs. Corrosive Sublimate, see Mercur Coumarin, refined, see Aromatic Cream Tartar, U.S.P.	.25	-	.28
Corn Syrup100 lbs.	2.29	-	2.59
Corrosive Sublimate, see Mercur	У		
Coumarin, refined, see Aromatic	Cher	nica	ls
Cream Tartar, U.S.P	-	_	.33
Imported, U.S.P	_	_	.26
Creosote, U.S.P	.40	-	.45
Carbonate	1.80	-	2.00
Cresol, U.S.Pb.	.14	_	.15
Dionin, See Morph. Ethyl Hydi	rochl.		
Corrosive Sublimate, see Mercur Commarin, refined, see Aromatic Cream Tartar, U.S.P. b. Imported, U.S.P. b. Creosote, U.S.P. b. Carbonate b. Cresol U.S.P. b. Dionin, See Morph. Ethyl Hyd. Dover's Powder, U.S.P. b. Emetine Alk., 15 gr. vlals. ea. Hydrochloride, U.S.P. oz. 15 gr., vials ea.		- 3	2.20
Emetine Alk., 15 gr. vialsea.	-	-	1.10
Hydrochloride, U.S.Poz.	_	-10	5.00
15 gr., vialsea. Epsom Salt, see Mag. Sulfate	-	-	.75
Epsom Sait, see Mag. Sultate		-	
Ergotin, Bonjeanb. Eserine Sulfateoz.	14.00	1	
Eserine Sunate	14.75	-1	5.00

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Amidopyrine Antipyrin Bromides Caffein Citrates Creosote Carbonate Glycerophosphates Guaiacol Carbonate Guaiacol Liquid Iron Cacodylate Pancreatin Pepsin Quinine Sulphate Resorcin Salicylates Sodium Cacodylate Sodium Methylarsinate

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Hexamethylenamine
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Silver Nucleinate
Silver Proteinate
Sodium Benzoate
Thymol Iodide
Strychnine and its
Salts

SE

Fine Chemicals

			_
Ether, U.S.P., Conc. bulk. fb. — 16 Washed, bulk fb. — 33 Nitrous, conc. fb. — 97 U.S.P., 1880, bulk fb. — 40 Anaesthesia, bulk fb. — 49 Ethyl Acetate, pure gal. — 1.00 Chloride fb. 55 - 60 Ethyl Methyl Ketone. fb. 13 — 14 Eucalyptol, U.S.P., See Aromatic Chemicals Formaldehyde fb. — 12 Second Hands fb. 11 — 111/2 Gelatin, silver fb. 1.25 — 1.35 Gold Label fb. — 1.30 Glycerln C. P. drums, bbls., extra fb. 14 — 15 Cans fb. 16 — 17 Dynamite, drums loose fb. 12½—13 Saponification, loose fb. 12½—13 Saponification, loose fb. 08 — 09 Soap Lye, loose fb. 07½—08 Guaiacol, liquid fb. 3.25 — 3.50 Carbonate fb. 3.75 — 4.00 Haarlem Oll, dom gross for 5.70 — 5.90 Hydrastine, Aikaloid oz. 11.00 — 14.00 Hydrochloride fb. 3.75 — 9.00 Hydrogen Peroxide, U.S.P., 19 gr. lots 4-0z. bottles gross 13.25 — 13.50 Sozo bottles gross 12.55 — 9.00 Sulfate for 1.50 Hydroquinone, bulk fb. — 1.50 Hydroquinone, bulk fb. — 1.50 Hyoscyamine Alkaloid oz. 21.00 — 14.00 Sulfate for 22.00 Mydroquinone, bulk fb. — 1.50 Hyoscyamine Alkaloid oz. 21.00 — 25.00 Sulfate for 22.00 Sulfate for 22.00 Sulfate for 22.00 Sulfate fb. — 3.50 Tincture, U.S.P., bbls. gal. 3.60 — 3.75 Lodoform, Powdered, bulk. fb. — 4.75 Loystals fb. — 5.75	Iron Citrate, U.S.P., VIII	Mercury Blue Oint., 30 p.c. tb. 50 p.c. tb. Citrine Ointment tb. Calomel, Amer. tb. Carlosive Sublimate, cryst. fb. Powdered Granular tb. Hodde, Green tb. Red tb. Yellow tb. Red tb. Powdered tb. Powdered tb. Powdered tb. Powdered tb. Powdered tb. White Precipitate tb. Powdered tb. Methyl Acetone, bbls. gal. Methyl Acetone, bbls. gal. Methyl salicylate, see Aromatic Methylene Blue, medicinal. fb. Milk, powdered tb. Mineral Oil, white gal. Morphine, Acet., 10-oz. in 5s. oz. Hydrochoride, 10-oz. in 5s. oz. Hydrochloride, 10-oz. in 5s. oz. Sulfate, 10-oz. in 5s. oz. Diacetyl, Alk., 10 oz., ½s. oz. Diacetyl, Alk., 10 oz., ½s. oz. Diacetyl Hydel., 10 oz., ½s. oz. Cpium cases, U.S.P. Granular tb. Powdered, U.S.P. tb. Oxgall, pure, U.S.P. tb. Papaain tb. Paraformaldehyde tb. Persion Powd., U.S.P. tb. Cream White tb. Lily White tb. Lily White tb. Phenophorus, yellow tb. Piperazine Hydrochloride oz.	5.00 — 5.28

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Eastman Organic Chemicals

DURING the past two months the following chemicals have become available:

> 1088 * Acetylacetone 1061 * m-Aminophenol 1089 * Iso-Amyl Benzoate 1053 * Iso-Amyl Formate 1090 * Barbituric Acid 1083 * dl-Benzoylalanine

1054 * Benzoylcarbinol 1095 * d-Bornyl Acetate

1095 * d-Bornyl Acetate
1072 * o-Bromobenzyl Chloride
1070 * p-Bromobenzyl Chloride
1094 * Carvone
1059 * o-Chlorobenzyl Chloride
1073 * Chlorocyclohexane
1098 * Decane (Di-iso-amyl)
1060 * Dimethyl-alpha-naphthylamine
1067 * Diphenylurethane
1078 * Di-p-tolyl Ketone
1066 * Ethyl Adipate

Of the above list all those distinguished by an asterisk have been prepared or purified in our laboratory.

EASTMAN KODAK COMPANY

RESEARCH LABORATORY

ROCHESTER, N. Y.

- .56
- .72
- .48
- .87
- .82
- .66
- 3.11
- 3.21
- .91
- 1.01
- 1.06
- 1.11
- .56
- .78

icals

5.25
- .16
- 1.25
- 4.90
- 4.90
- 4.90
- 4.90
- 8.40
- 7.60
- 8.95
- 5.50
- 6.75
- 1.55
- 1.75
- 3.00
- .65
- 2.50
- .04/2
- .11
- 1.50
- .35
- 6.75
- 1.50
- .35
- 6.75
- 1.50
- .11
- 1.50
- .35
- 6.75
- 1.50
- .35
- 6.75

Fine Chemicals

Podophyllintb.	4.25	_	4.35
Potassium acetate	_	-	.40
Bicarbonate, U.S.Pfb.	.12	_	.13
Bisulfatetb.	_	_	.40
Bromide Crystals, bulk tb.	_	-	.23
Granulatedtb.	_	_	.23
Imported, U.S.P	.14		.17
Carbonate, U.S.P	.12		.14
Caustic, U.S.P. (by alcohol)tb.	-	_	.45
U.S.P. purifiedtb.	_	_	.30
Chlorate, Imp., Powdtb.	.07	_	.10
Chromate, cryst. yellow,			
tech. 1-lb., c. b. 10tb.	_	_	.42
Citrate, bulk, U.S.Ptb.	.68	-	.70
Glycerophosphate, 75 p.coz,	1.85	-	1.90
Guaiacol Sulfonate		_	3.50
Hypophosphite, bulktb. Iodide, bulktb.	-	_	.85 2.75
Second Handsb.	_	_	2.65
Lactaphosphateoz.			.90
Nitrate, see Saltpetre	1		-
Oxalate, Neutral	.50	_	.55
Saliculate, U.S.F			1.10
Salicylate	.35		.40
Tartratefb.	-	_	.65
Pumice Stone, lump	.04	_	
Powderedtb.	.03	-	
Pyridingal.	_		2,75
Quinine Sulf., 100-oz. tlnsoz.	-		.70
1-oz. tinsoz.	-	_	.78
Imported, Javaoz. Imported, Japaneseoz.		-	
Bisulfate, 100-oz. tinsoz.		_	.70
Alkaloidoz.	_	_	1.05
Acetateoz.			1.05
Benzoateoz.			1.05
Citrateoz. Dihydrochlorideoz.			1.05
			1.05

SEPTEMBER 14, 1921]

	_	_	
1			
Quinine Dicarbonateoz.	2.00		
Ethyl Carbonateoz.	1.25	_	1.50
Hydrochlorideoz.			
Japaneseoz.		-	
Hypophosphiteoz.	-	-	1.05
Phosphateoz.	-	_	.96
Salicylateoz.		-	
Quinidine Alk., crystals, tins.oz. Sulfate, tinsoz.	=	_	.96 .71
Resorcinol, crystals, U.S.P tb.	1.75	_	2.00
Technical, See Intermediates			
Rochelle Salt, crystalsfb. Imported, U.S.Pfb.	401	_	.25
		5-	
Rosewater, triplegal.		-	
Saccharin, U.S.Ptb.		-	2.25
Resaletb.			
Salicin, bulktb.	4.00	_	4.50
Salol, U.S.P., bulkb.	.60	_	.70
Saltpetre, Double ref. bblsfb.			
Santonin, cryst., U.S.Pfb.1 Powdered	20.00	-12	0.00
Seidlitz Mixture, bbls b.		-	
Silver Nitrate, 500 oz. lotsoz.	.413	4-	.4244
Nucleinateoz. Proteinateoz.	.28	_	3.1
Colloidaloz.	_	_	1.60
		-	
Soap, Castile, white puretb.	.10	_	8.50
Powd., U.S.P., bbls	-	-	.36
Green, U.S.Ptb.	.063	4-	.071/2
Sodium, Acetate, U.S.P., gran.lb.	.12	-	.15
Rengoste gran IISPth.	.52	-	.70
Bicarb., U.S.P., powd., bbls.tb. Bromide, U.S.P., bulkb.	.023	4-	.021/2
Bromide, U.S.P., bulkfb.	17		.24
Imported, U.S.PID.			
Cacodylateb. Caustic, U.S.P., See Sod. Hyd	3.60	_	4.00
Caustic, U.S.P., See Sod. Hyd	roxid	C	
Chlorate, U.S.P., 8th Rev. Crystals, c.b., 10	.13	-	.15
Granular, c.b., 10	.10	-	.18
Chloride, C. Pb.	-	_	.071/2

-	Sodium Citrate, U.S.P., Cryst.			
	VIII		-	.60
1	Granular, U.S.P., gran.IX.tb.	-	-	.73
	Cyanide 96-98, see Heavy Chen	nicals		
	Glycerophosphate, crystalstb.		_	
	Hydroxide, U.S.Ptb.	_	-	.18
	Hypophosphite, U.S.Ptb.	.75		
ı	Iodide, bulk			3.30
1	Nitrate, U.S.Ptb.	.057	-	.07
1	Oxalate, Neutralb.	.55		
1	Phosphate, U.S.P., gran	_	-	.38
	Recrysttb.			.13
	Pyrophosphate	-	_	.14
	Salicylate, U.S.Pfb.	.26		
1	Sulfate (Glauber's Salt).cwt.			1.75
	Needle Crystalscwt.	-	_	2.25
	Sulfocarbolate	.25		
	Spartein Sulfatetb.	.60	_	.70
	Strontium Brom. Cryst., blk.tb.	-	-	.34
1	Carbonate, pure	-	_	.28 .
	Iodide, bulktb.			3.25
	Nitrate, Kegsb.	.40		131/5
i	Salicylate, U.S.P			1.70
	Strychnine Alkd., crystoz. Acetateoz.			1.60
	Hypophosphiteoz.			1.80
	Hydrochlorideoz.	-	-	1.60
	Nitrateoz.	-	-	1.60
	Sulfate, crystals, bulkoz.			1.35
	Sugar of Milk, Powderfb.	.17	_	.18
2	Sulfonal, 100-oz. lotsoz.	-	-	.38
	Sulfonethylmethane, U.S.Pib.			6.50
	Sulfonmethane, U.S.P			5.25
2	Sulfur, roll, bbls100 fbs.	2.15		
	Flour, 100 p.c. pure100 fbs.	2,50 3,00		
	Flowers, 100 p.c. pure100 fbs. Precip., U.S.P			.211/
	Lac Sulfurb.	.09	_	.10
	Tartar Emetic, techtb.			.37
	U.S.Pb.			.40
	Talcum, Amer., bags100 fbs.	_	_	1.40
2	Purified100 fbs.	-	_	3.50

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Correspondence in English, French and Spanish

AGENTS FOR

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SE

Fine Chemicals

Ether, U.S.P., Conc. bulktb16 Iron Citrate, U.S.P., VIIItb99 Mercury Blue Gint., 30 p.ctb. washed, bulktb33 and Ammon. Citrate, U.S.P.tb84 50 p.c	5
Nispurs One Dispurs Dispurs	7 4 8 8 3.1 3.2 3.1 1.0 1.0 1.0 1.0 1.0 1.0 1.0

FOOD COLORS

AMARANTH ERYTHROSINE INDIGO DISULFO NA LIGHT GREEN SFYK NAPTHOL YELLOW ORANGE K PONCEAU K **TARTRAZINE** YELLOW ABK

Kenart Synthetic Products Co.

241 E. Illinois Street CHICAGO, ILL.

Eastman Organic Chemicals

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1060 * Dinlethyl-alpha-ne 1067 * Diphenylurethane 1078 * Di-p-tolyl Ketone 1066 * Ethyl Adipate

Of the above list all those distinguished by an asterisk have been prepared or purified in our laboratory.

EASTMAN KODAK COMPANY

RESEARCH LABORATORY

ROCHESTER, N. Y.

- .56 -- .72 - .48 - .87 - .82 - .66 - 3.11 - 3.21 - 3.21 - .91 - 1.01 - 1.06 - 1.11 - .56 - .78 icals

- 5.23
- .16
- 1.25
- 4.90
- 4.90
- 4.90
- 8.40
- 7.60
- 8.95
- 5.50
- 6.75
- 1.55
- 1.55
- .65
- 2.50
- .04/2
- .11
- .12
- .150
- .35
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Fine Chemicals

Podophyllin	.14 .12 - .07	111111111	.40 .13 .40 .23 .23 .17
Potassium acetate tb. Bicarbonate, U.S.P. tb. Bisulfate tb. Bromide Crystals, bulk tb. Granulated tb. Imported, U.S.P. tb. Caustic, U.S.P. (by alcohol) tb. U.S.P. purified tb. Chiorate, Imp., Powd. tb. Chromate, cryst. yellow, tech. 1-lb., c. b. 10. tb. Citrate, bulk, U.S.P. tb. Glycerophosphate, 75 p.c. oz. Guaiacol Sulfonate th. Jodide, bulk tb. Lodide, bulk tb. Second Hands tb.	.12 .14 .12 .07	111111111	.40 .13 .40 .23 .23 .17 .14 .45
Bicarbonate, U.S.P. the Blsulfate the Bromide Crystals, bulk to Granulated the Imported, U.S.P. the Carbonate, U.S.P. the Caustie, U.S.P. (by alcohol) the U.S.P. purified the Chlorate, Imp., Powd. the Chromate, cryst. yellow, tech. 1-lb., c. b. 10. the Citrate, bulk, U.S.P. the Glycerophosphate, 75 p.c. oz. Guaiacol Sulfonate the Hypophosphite, bulk the Loidide, bulk the Second Hands the	.14 .1207		.13 .40 .23 .23 .17 .14 .45
Bisulfate	.14 .1207		.40 .23 .23 .17 .14 .45
Bromide Crystals, bulktb. Granulated tb. Imported, U.S.P tb. Carbonate, U.S.P tb. Caustic, U.S.P. (by alcohol) tb. U.S.P. purified tb. Chlorate, Imp., Powd tb. Chromate, cryst. yellow, tech. 1-lb., c. b. 10 tb. Citrate, bulk, U.S.P tb. Glycerophosphate, 75 p.c oz. Guaiacol Sulfonate tb. Hypophosphite, bulk tb. Iodide, bulk tb. Second Hands tb.	.14 .12 - .07		.23 .23 .17 .14 .45
Granulated th. Imported, U.S.P. th. Carbonate, U.S.P. (by alcohol) th. U.S.P. purified th. Chlorate, Imp., Powd. th. Chlorate, Imp., Powd. th. Chromate, cryst. yellow, tech. 1-lb., c. b. 10. th. Citrate, bulk, U.S.P. th. Glycerophosphate, 75 p.c. oz. Guaiacol Sulfonate th. Hypophosphite, bulk th. Lodide, bulk th. Second Hands th.	.14 .12 		.23 .17 .14 .45
Imported, U.S.P	.14 .12 — 		.17 .14 .45
Carbonate, U.S.P	.12	_	.14 .45
Caustic, U.S.P. (by alcohol)tb. U.S.P. purified tb. Chlorate, Imp., Powd tb. Chromate, cryst. yellow, tech. 1-lb., c. b. 10 tb. Citrate, bulk, U.S.P tb. Glycerophosphate, 75 p.c oz. Guaiacol Sulfonate tb. Hypophosphite, bulk tb. Iodide, bulk tb. Second Hands tb.	.07	_	.45
U.S.P. purified	.07	-	.30
Chlorate, Imp., Powdtb. Chromate, cryst. yellow, tech. 1-lb., c. b. 16tb. Citrate, bulk, U.S.Ptb. Glycerophosphate, 75 p.coz. Guaiacol Sulfonatetb. Hypophosphite, bulktb. Iodide, bulktb. Second Handstb.	.07		
Chromate, cryst. yellow, tech. 1-lb., c. b. 10 tb. Citrate. bulk, U.S.P. tb. Glycerophosphate, 75 p.c. oz. Guaiacol Sulfonate tb. Hypophosphite, bulk tb. Iodide, bulk tb. Second Hands tb.		-	10
Chromate, cryst. yellow, tech. 1-lb., c. b. 10 tb. Citrate. bulk, U.S.P. tb. Glycerophosphate, 75 p.c. oz. Guaiacol Sulfonate tb. Hypophosphite, bulk tb. Iodide, bulk tb. Second Hands tb.			
tech. 1-lb., c. b. 10	_		
Citrate, bulk, U.S.P		_	.42
Glycerophosphate, 75 p.coz. Guaiacol Sulfonate tb. Hypophosphite, bulk tb. Iodide, bulktb. Second Handstb.	68		.70
Guaiacol Sulfonate	1.85		
Hypophosphite, bulk	2.75		
Second Handstb.	-	-	.85
	*****	_	2.75
	_	_	2.65
Nitrate, see Saltpetre	-	_	.00
Oxalate, Neutral	.50	_	.55
Permanganate, U.S.P b.	.22	_	
Salicylateb.	1.00		1.10
Sulfate, C.Ptb.	.35	-	.40
Pumice Stone, lump	-	_	.65
Powdered		_	
Pyridingal.			2.75
Duinine Sulf., 100-oz. tlnsoz.		_	
1-oz. tinsoz.		=	.78
		_	
Imported, Javaoz. Imported, Japaneseoz.	-	-	.65
Bisulfate, 100-oz. tinsoz.	_	_	.70
Alkaloidoz.	_	_	1.05
Acetateoz.			1.05
Benzoateoz.			1.05
Citrateoz. Dihydrochlorideoz.			1.05
Dihydrobromide			

Ouinine Dicarbonateoz. 2.00 - 3.00	
Ouinine Dicarbonate or 200 - 300	
Ethyl Carbonateoz. 1.25 — 1.50 Hydrochlorideoz. — — .90	2
• •	
Hypophosphiteoz. — — 1.0 Phosphateoz. — — .9	
Salicylateoz9	
Quintdine Alle crystale tine or 9	6
Sulfate, tinsoz J	
Resorcinol, crystals, U.S.P. 1.75 - 2.00 Technical, See Intermediates	
Rochelle Salt, crystalstb2	5
Imported, U.S.P	L
Rosewater, triplegal 1.5	
Saccharin, U.S.Ptb 2.2	5
Resaletb. 2.00 — 2.10	
Salicin, bulk	
Saltpetre, Double ref. bblstb0934— .12	24
Santonin, cryst., U.S.Ptb.120.00 -126.0	
Powdered	0
Seidlitz Mixture, bbls)
Silver Nitrate, 500 oz. lotsoz41344	
Nucleinate	5
Proteinate	1
Soap. Castile, white puretb182	
Conti's	0
Powd., U.S.P., bbls	5
Sodium, Acetate, U.S.P., gran.tb1218 Benzoate, gran., U.S.Ptb527	2
Bicarb., U.S.P., powd., bbls.lb023402 Bromide, U.S.P., bulk	11/2
Bicarb., U.S.P., powd., bbls.tb02406 Bromide, U.S.P., bulk	4
Imported, U.S.P	
Cacodylate)
Caustic, U.S.P., See Sod. Hydroxide Chlorate, U.S.P., 8th Rev.	
Crystals, c.h., 10tb, .1310	
Granular, c.b., 10	
	71/2

	Sodium Citrate, U.S.P., Cryst.			
	Granular, U.S.P., gran.IX.1b.	-	-	.60 .73
				./3
	Cyanide 96-98, see Heavy Chen			
	Glycerophosphate, crystalstb.			1.95
	Hydroxide, U.S.Ptb.			.18
	Hypophosphite, U.S.Ptb.	.75		
	Iodide, bulktb.	~	_	3.30
	Nitrate, U.S.P.	.00%	2	.65
	Oxalate, Neutral	.50	_	.38
	Phosphate, U.S.P., granfb.	_	_	.07
	Recrysttb.		_	
	Pyrophosphatetb.	_	_	.14
	Salicylate, U.S.Ptb.	.26	-	.28
	Sulfate (Glauber's Salt).cwt.	-	-	1.75
	Needle Crystalscwt.			2.25
	Sulfocarbolatetb.			.27
	Spartein Sulfatetb.	.60	marine	.70
4	Strontium Brom. Cryst., blk.lb.	-	-	.34
	Carbonate, pure			3.25
	Nitrate, Kegstb.			.13%
	Salicylate, U.S.Ptb.			.42
4	Strychnine Alkd., crystoz.			1.70
	Acetateoz.	-	-	1.60
	Hypophosphiteoz.			1.80
	Hydrochlorideoz.	-	-	1.60
	Nitrateoz.			1.60
	Sulfate, crystals, bulkoz. Sugar of Milk. Powder			.18
4	Sugar of Milk, Powder	.17	_	.18
3	Sulfonethylmethane, U.S.Ptb.			6.50
	Sulfonmethane, U.S.Ptb.			5.25
4	Sulfur, roll, bbls100 fbs.	2.15		
-	Flour, 100 p.c. pure100 fbs.	2,50		
	Flowers, 100 p.c. pure100 fbs.	3.00		
	Precip., U.S.Ptb.	.175	2-	.211/
	Lac Sulfurtb.			.10
	Tartar Emetic, tech			.37
	U.S.Ptb.			.40
,	Talcum, Amer., bags100 fbs. Purified100 fbs.			1.40
2	Purined100 lbs.	-	_	3.30

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ESTABLISHED 1884.



Heavy Chemicals

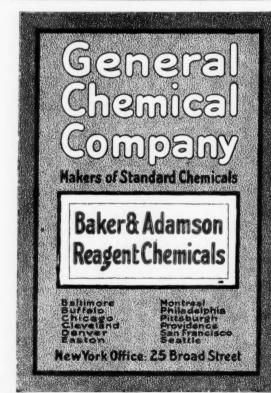
Terpin Hydrate	.50	_	.53	
Theobromine Alkaloidtb.	6.00	-	6.40	
Thymol, crystals, U.S.Pfb.	5.50	-	5.75	
Indide, U.S.P., bulktb.	9.00	-	9.10	
Tin bichloride, see Heavy Chem				
Oxide, 500 lb, bblslb.	_	-	.40	
Toluene, See Coal Tar Crudes				
Iribromphenoltb.	-	-	.90	
Trionaloz.	_		.47	
W Haze Ext., dile dia.				
bblgal.	1.30	_	1.35	
Yohimbineoz.	_	1	5.00	
Zine Carbonate, U.S.P., precip. lb.	_	-	.37	
Chloride, U.S.Ptb.	.35	_	.40	
Iodide, bulktb.	-	_	3.75	
Oxide, U.S.P., bbls	-	-	.17	
Stearate			.24	
Sulfate, U.S.P			.09	
		_		-

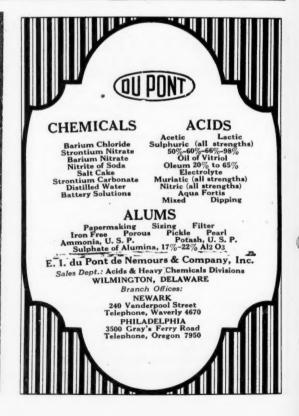
Heavy Chemicals

CIDS			
A.etic. 28 p.c., bbls 100 lbs.	2.50	-	2.75
56 μ.c., bbls100 tbs.	5.00	-	5.50
so p.c., bhls., Com'l.100 lbs.	7.89	-	8.64
so p.c., bbls., pure100 fbs.		-	9.25
Glacial, bbls. & cbys. 100 fb.		0 .	-10.50
Chlorosulfonic, 93-95 p.c tb.	.15		.16
Hydrobromic com., 48 p.c 1b.	.38	-	.40
Pure, 40 p.ctb.	_		.45
Hydrofluoric 30 p.c. bblstb.	.07	-	.071/2
48 p.c. in carboys	.12	_	.13
52 p.c. in carboystb.	.13	_	.14
60 p.c. in carboystb.	.16	_	.17
White Acidtb.	.32	-	.33
Hydrofluosilicic 35 p.ctb.	.10	_	.121/2
Lactic. 22 p.c	.045	2-	.0°
50 per cent pure	-	-	.35
Technical	_	_	-
90 p.c. techth.	-	-	.15
Mixed. Nitricunit	.093	4-	.101/4
Sulfuricunit		-	.0134
Muriatic, 18 deg cbys. 100 fbs.	1.20	-	1.75
20 deg. carboys100 ths.	1.50	-	2.00
22 deg. carboys100 lbs.	1.90	_	2.25

Acid. Muriatic, Iron Free cbys. 8 deg. 100 lbs. 1.50 - 1.75 20 deg. 100 lbs. 1.75 - 2.00 22 deg. 100 lbs. 2.00 - 2.25 Nitric. 36 deg. carboys. lb. 05½- 0.6½ 38 deg. carboys. lb. 06 - 97 40 deg. carboys. lb. 06 - 97 40 deg. carboys. lb. 06 - 97 42 deg. carboys. lb. 06 - 97 42 deg. carboys. lb. 07 - 08 Phosphorle, 50 p.c., tech. lb. 13 - 18 Syrupy, 65 p.c. lb. 20 - 22 Pyroligneous, Tech. gal. 12 - 12½ htturic, I ank carlots 06 deg. fo.b. wks. lon 11.00 - 16.00 06 deg. fo.b. wks. lon 18.00 - 20.00 20 p.c. Oleum, fo.b. wkston 21.00 - 23.00 20 p.c. Oleum, ton 65.00 - 75.00 Saffunds com. lb. 12 - 14 I annie, Tech. lb. 65 - 88 Acetone lb. 104 - 94 Acetic Anhydride, 85 p.c. lb 40 Acetic Anhydride, 85 p.c. lb 40 Acetic Anhydride, 85 p.c. lb. 03¼- 03¼ Ground lb. 03¼- 03¼ Chrome lb. 04 - 04¼ Chrome lb. 04 - 05¼ Ground ll00 lbs. 2.00 - 2.75 Node Ground ll00 lbs. 2.00 - 2.75 Ammonium Bifluoride lb. 22 - 25 Ammonium Bifluoride lb. 22 - 25 Ammonium Bifluoride lb. 0 22 1 liported lb. 0 23 1 liported lb. 0 22 1 liported lb. 0 23 1 liported lb. 0 24 1 liported lb. 0 22 1 liported lb. 0. 0744 liported lb. 0 23 1 liported lb. 0. 0744 liported lb. 0 23 1 liported lb. 0. 0744 liported lb. 0 22 1 liported lb. 0. 0744 li					
38 deg. carboys		18 deg 100 fbs. 20 deg 100 fbs. 22 deg 100 fbs.	1.75 2.00	_	2.00 2.25
Pyroligneous, Tech.		38 deg. carboys	.06 .06½	=	.07 1/2
Pyroligneous, Tech.		Phospheric, 50 p.c., techlb. Syrupy, 65 p.clb.	.13	=	.18
66 deg., fo.b. wks. ton 18.00 -20.10 20 p.c. Oleum, fo.b. wkston 21.00 -23.00 30 p.c. Oleum ton 27.50 -32.00 60 p.c. oleum. ton 65.00 -75.00 62 p.c. oleum. ton 65.00 -75.00 63 p.c. oleum. ton 65.00 -75.00 64 p.c. oleum. ton 65.00 -75.00 65 p.c. oleum. ton 65.00 -75.00 66 p.c. oleum. ton 65.00 -75.00 66 p.c. oleum. ton 65.00 -75.00 67 l.c. oleum. ton 65.00 -75.00 68 Acetic Anhydride, 85 p.c. ib. 12½- 13 68 Acetic Anhydride, 85 p.c. ib 40 68 Acetic Anhydride, Redistilled. to 45 - 50 69 Alum. ammonia, lump. ib. 0.3½- 0.3½ 60 Ground ib. 0.3½- 0.3½ 60 Chrome ib. 0.07½- 0.05 61 Potash lump ib. 0.03½- 0.05½ 62 Powdered ib. 04 - 06½ 63 Ground ib. 04½- 06½ 64 Chrome ib. 09 - 10 65 Soda Ground ib. 09 - 10 65 Soda Ground ib. 00 ibs. 3.50 - 4.50 64 Anhydrous ib. 38 - 45 65 Anhydrous ib. 38 - 45 65 Anhydrous ib. 250 - 3.00 66 Commercial ioli ibs. 2.50 - 3.00 67 Commercial ioli ibs. 2.50 - 2.75 68 Anmonium Bifluoride ib. 26 - 45 69 Ammonium Bifluoride ib. 26 - 45 60 deg. ib. 074, 094 60 Ammonium Water. 26 deg. ib. 074, 094 60 20 deg. ib. 0644 - 084 60 Arganium Carbonate ib. 0644 - 0.84 60 deg. ib. 0644 - 0.84 60 deg. ib. 0644 - 0.84 60 deg. ib. 0644 - 0.84		Pyroligneous, Techgal.	.12	_	.121/2
60 p.c. oleum. ton 65.00 -75.00 Saffurious com. b. 12 - 14 Tannic, Tech. b. 65 - 80 Acetone b. 12½- 13 Acetic Anhydride, 85 p.c. b 40 Acetyl Chloride, Redistilled.b. 45 - 30 Alum, ammonia, lump. b. 03¾- 03¾ Ground b. 03¾- 03¾ Chrome b. 07½- 10 Powdered b. 04 - 06 Chrome b. 07½- 10 Powdered b. 044 - 06¾ Chrome b. 09 - 10 Noda Ground 00 lbs. 3.50 - 4.50 Anhydrous b. 38 - 45 Sulfate Iron free 100 bs. 2.50 - 3.00 Commercial 100 bs. 2.50 - 3.00 Anmonium hydrate light 22 - 25 Ammonium hydrous b 31 Imported b 22 4 Ammonium Carbonate b. 07 99 4 Ammonium Water. 26 deg b. 074 904 20 deg bb 0644084 18 deg bb 0644084		66 deg., f.o.b. wkston	18.00	-2	0.00 3.00
Salturous com. 12 14 Tannic, Tech 15 16 5 80 Acetic Anhydride, 85 p.c. 15 - 40 Acetyl Chloride, Redistilled, 15 45 50 Alum. ammonia, lump 15 0.3½ 0.3½ Ground 15 0.3½ 0.3½ Powdered 15 0.4 0.4½ Chrome 15 0.4 0.5½ Powdered 15 0.4 0.5½ Powdered 15 0.4 0.5½ Chrome 15 0.9 10 Soda Ground 100 15s 3.50 4.50 Anhydrous 100 15s 2.50 3.00 Commercial 100 15s 2.50 3.00 Ammonium hydrate light 15 2 25 Ammonium Bifluoride 15 2.50 4.50 Ammonium Bifluoride 15 2.50 3.00 Ammonium Garbonate 15 0.7 0.9 Ammonium Garbonate 15 0.7 0.9 Ammonium Garbonate 15 0.06 0.8 20 deg 15 0.06 0.73 13 0.73 0.73 14 15 15 15 15 15 16 16 16 16 16 16 16		6) p.c. oleumton	65.00		75.00
Acetyl Chloride, Redistilled.b. 45 - 50	-	Salturous com	.12	-	.14
Alum ammonia, jump. 10. 03974 03974 03976	_	Acetone	.127	<u>-</u>	.13
Alum ammonia, jump. 10. 03974 03974 03976		Acetyl Chloride, Redistilled.tb.	.45	_	.50
Chrome 1b	50	Alum. ammonia, lump. 10. Ground b. Powdered b. Chrome b. Potash lump b. Powdered b.	.033 .04 .07 ½ .033 .04		.0394 .04 .0434 .10 .0534 .06
Alumnum chloride, carboys.b. .04 .05		Chrometb.	.09	-	.10
Ammonium hydrate light 10. 22 - 25		Anhydrous	.04 .38 2.50 2.00	=======================================	.05 .45 3.00 2.75
Ammonia Water, 26 degtb0734— .0944 20 degtb0654— .084 18 degtb0534— .0734	73	Ammonia. Anhydroustb. Ammonium Bifluoridetb. Importedtb.	.26	=	.31 .45 .22
	44	Ammonia Water, 26 degtb. 20 degtb. 18 degtb.	.073/ .065/ .053/		.094/4
	_			_	

_			
	Ammonium Nitrate	.071/	0714
1			70
	Sal Ammoniae gray lb.	.07	- 0714
	Imported th	063	- 07
	Granulated white lb.	07	- 0716
1	Imported th	06	0614
	Fersultate, bulk B. Sal Ammoniac, gray bb. Imported bb. Imported bb. Imported bb. Lump bb. Sulfate, dbl. bags f.as.,100 lbs. Down Rulk wks 100 lbs.	16	.00%
	Culfate dhi bana fa a 100 lba	2.40	3.50
1	Surface, doi. bags 1.a.s.100 ibs.	2.40	- 2.30
1	Dom., Bulk., wks 100 lbs. Antimony chloride, liqlb.	1.5	- 1.90
-	Antimony chloride, liqIb.	-13	17
d	Anhydrous tb.	.50	55
1	Oxide	.07	07%
	Suinde, Crimson	_	00
1	iolden No. 1	-	- 43
1	Vermillion	000	- 55
-	Arsenic, white	.061/	4061/2
1	RedID.	.11	12
1	Oxide		-60.00
	Importedton	43.00	-40.10
1	Binoxidetb.	.17	24
	Carbonateton	48.00	-50.00
1	Nitrateb.	.073	410
	Barytes, floated, white ton	28.00	-29.00
.	Blanc Fixe, importedton	40.00	-42.00
	Bleaching Pd., f.o.b.wks.100 tbs. Export, F.A.S100 tbs. Second Hands, Spot100 tbs.	2.25	— 2.50
	Export, F.A.S100 lbs.	_	— 2.50
	Second Hands, Spot100 fbs.	2.50	- 3.00
.	Second Hands, wks100 lbs.	_	- 2.05
	Second Hands, Spot. 100 lbs. Second Hands, wks. 100 lbs. Bromine, Purified wks. 1b. Calcium Acetate 100 lbs.	_	27
	Calcium Acetate100 lbs.	-	- 2.00
	Arsenatelb.	.18	19
1	Carbideb.	.041/	.05
-1	Carbonate100 fbs.	1.40	- 2.00
1	Chloride, solid, f.o.b.N.Y.ton	_	-28.75
1	Granulated, f.o.b. N.Y. ton	-	-35.75
1	Flaked, f.o.b. N.Yton	_	-35.75
1	Chloride, solid, f.o.b.N.Y.ton Granulated, f.o.b. N.Y.ton Flaked, f.o.b. N.Yton Anhydrous	.14	15
- 1	Nitrateton		60.00
1	Chlorine, liquid tb.	.08	15
1	Carbon binuleda CT & leasth	06	0011
-	Carbon blacktb.	.12	20
1	Carbon tetrachlor., C.L.&Lesstb.	.101	12
	Carbon black	2.00	- 2.25
	Conner Carbonate th	27	28
	Subacetate (Verdigris)tb.	.24	28
	Subacetate (Verdigris)tb. Sulfate100 tbs.	5.00	- 6.00
			2.00
=			





.0734 .50 .0734 .0734 .0654 .172 .50 .0654 .173 .0654 .173 .0654 .174 .0654 .175 .0654 .189 .0654 .190 .190 .0654 .190 .0654 .190 .0654 .190 .0654 .190 .0654 .190 .0654 .190 .0654 .190 .0654 .190 .0654 .190 .0654 .190 .0654 .190 .0654 .190 .0654 .190 .0654 .190 .0654 .190 .0654 .190 .0654 .190 .190 .0654 .190 .190 .0654 .190 .06

Heavy Chemicals

		_		
Copperas, wks100 lbs85 - 1.25	Phosphorus Oxychloridetb.	.4550	Sodium Chloride, techton	17.00
Ferric Chloride, crys	Sesquisulfideb.	421/4	Cyanide, 96-98 p.,c	.2830
	Trichloride	.6065		
			Imported, 120 p.cb.	
Liquid, 40 deg		4.25 - 4.50	128 p.ctb.	.23 — .25
Ferrous Chloride, crys		4.35 - 4.60	73-76 p.cb.	.2526
Flake White	Potash Caustic, 88-92	.1214	Fluoridetb.	.10 — .11
Fluorspar, Powderedton 30.00 -35.00	Importedtb.	.041/205	Hydrosulfitetb.	.85 - 1.00
Acid Grade, f.o.b. mineston 22.50 -25.00	70-75%tb.	.1012	Hyposulfite, Crys., bbls.100 lbs.	3.50 - 3.75
Fuller's Earth, f.o.b. mineston 16.00 -17.00	Potassium Bichromate 1b.	.111/2 .113/4	Granulated100 fbs.	3.95 - 4.30
Importedton 35.00 -40.00	Binoxalate, techtb.	.4042	Nitrate, crude100 tbs.	2.15
Fusel Oil, crudegal 1.50	Carbonate, 80-85 p.c	.05051/2		.051/4 .051/4
Refinedgal 3.25	Hydratedtb.	.051/206	Double refined, Grantb.	.07071/2
	*85-90 p.ctb.		Nitrite	
			Peroxide	
White Cakes	90-95 p.cb.	.061/207	Phosphate (tri) reftb.	.0607
Granulated	96-98 p.ctb.	.0809	di-Sodium, U.S.P., gran 1b.	.071/2081/6
Brown Cakes	Chlorate, cryst	.1213	Technical	.043/4 .043/4
Arsenate, powdered	Powdered, Americantb.	.1213	Mono-Sodium, ref	.2530
Paste	Imported, pow. & crystb.	.061/210	Prusslate, Yellow	.123/2 .123/4
Nitrate	Muriate, basis 80 p.cunit	90	Silicate, 60 deg 100 fbs.	$3.12\frac{1}{2} - 3.50$
Oxide, Litharge, Amer. pd.fb08409	Shipmentunit		40 deg100 fbs.	1.10 - 2.00
Red, American	Metabisulfite	.4042	Sulfate, Gl'b salt100 tbs.	1.50 - 2.00
Sulfate, basic white	Perchloratetb.	.1920	Sulfide, 60 p.clb.	.041/4 .061/4
White, Basic Carb., Amer.	Permanganate, Com'1tb.	.2223	30 p.c. crystalslb.	.02340334
dry	U.S.P., See Fine Chemicals			.0334— .04
Lithopone	Prussiate, redb.	.2628	Sulfite. Crystals	
	Yellowtb.	.201/222	Dessicated	
Lime, hydrate			Thiocyanate	.8085
Acetate	Titanium Oxalate	1.20 - 1.25	Strontlum Nitrate	.12121/2
Nitrateton — -60.00		55	Carbonate	.29 — 30
Sulfur, Powd	Shipment, imptd	33 ·	Sulfur Chloride, red	$.0505\frac{1}{2}$
Magnesiteton 72.00 -75.00	Salt, techton	17.00	Yellow	.04041/2
Magnesium Sulfate, tech.100 lbs. 2.00 - 2.25	Salt Cake, bulkton 2	20.00 -25.00	Sulfur Dioxide liq. cyl	.0809
Imported	Saltpetretb.	.09341254	Sulfur, crudeton	20.00 -25.00
Carbonate, tech		2.00 - 2.15	Flour Com'l., bbls100 fbs.	1.45 - 2.00
Chloride, fusedton30.00	Basis, 48 p.c. wks.bgs.100 fbs.	1.621/2	Flowers, 100 p.c100 fbs.	2.25 - 3.05
Fluosilicate, 30% soln.100 fbs. 8.00 -10.00	Dense, 58 p.c. bags. 100 tbs.	-2.35	Sulfuryl Chloride	.2526
Manganese Chloride	Basis 48 p.c. wks.bgs.100 fbs.	1.60	Tartar Emetic, tech	.3437
Dioxide, 80-84 p.cton 55.00 -60.00		3.90 - 4.00		.1820
85-90 p.cton 60.0070.00			Tin, bichlorideb.	.261/2 .29
Sulfate	Basis 60 p.c100 fbs.	3.25	Crystalsb.	.38 — .40
Sullate	Ground, 76 p.c wks.100 fbs.		Oxideb.	
Niekel oxide	Sodium Acetatelb.	.040434	Whiting100 fbs.	1.15 - 1.75
Salts, single		3.50 - 4.50	Zinc. carbonate	.1618
double	Bichromate	.073/408	Chloride, Fused	.051/4 .061/2
Nitre Cake, bulk wkston 5.00 - 6.00	Bisulfate, bulk, wkston	5.00 - 6.00	Granulatedtb:	.051/4 .061/2
Orange Mineral	Bisulfite, Powd	.043/4053/4	Cyanidetb.	.4245
Paris Green	Solution 32-40 deg100 fbs.	1.60 - 2.10	Oxide, Frenchtb.	.11121/2
Phosphorus red		1.70 - 2.00	American	.0809
Yellowtb30 — .35	Chloratetb.	07%	Sulfate	.03031/2
		0//2	Juliate	



Soda Ash 58% Caustic Soda 76% Modified Sodas Special Alkali Bicarbonate of Soda U. S. P.

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CARBON TETRACHLORIDE

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Coal-Tar Products

Crudes

		-	
Anthracene 80-85 p.cfb. 40-45 p.c			1.00
Benzene, C. Pgal. Resale, drums included, gal.	.27	_	.33
90 p.cgal. Carbazol	.85 .75	=	.31 1.00 .90
Cresol, U.S.P	.17	_	.95 .21 .22
Naphthalene, ballstb.	.095	12-	.36 .101/ .091/
Phenol, Gov't Surplus	.12	4-	
Natural	.15 14.00 .25	-1	.16 8. 00 .31
Tar Acid Oil, 25 p.c. gal. 50 p.c. gal. Toluene, pure gal.		_	.34
Xylene, 10 deg dist. range.gal. 5 deg. dist. rangegal. Nitration, 2 deg. rangegal.	.35 .40 .45	_	.41 .46
	. 10		

Intermediates

Acid 1, 2, 4		
Acid, Anthranilic	1.40	1.50
Technicaltb.		
Acid Benzoic, tech		
Acid Broenner's	1.55	-1.70
Acid Chloroacetic, tech tb.		
Acid Cleves		
Acid Gammatb.		
Acid H		
Acid Laurent'stb.	.75	80
Acid Metantlic	1.60	- 1.70

	Acid Monosulfonic F (delta).fb. Acid Naphthionic, Crudefb. Refined	2.75 .70 .90	- 3.00 75 - 1.00
	Acid Nevile & Winther'stb. Acid Phthalictb. Anhydridetb.	.35	- 1.50 40 50
	Acid Picramic tb. Acid Picric tb. Acid Salicylic, tech. tb. Acid Sulfanilic, tech. tb. Acid Tobias tb.	.75 .30 .18 .27	85 45 20 30 - 2.00
	Acetanilide, tech	1.25	23 - 1.50 - 1.15
	p-Aminophenoltb. Hydrochloridetb.	1.40 1.75	- 1.65 - 2.05
	o-Aminophenol	3.00 .171/ .24	- 3.25 20 26
	p-Anisidinetb. Technicaltb.	3.00 1.65	- 3.10 - 1.75
	Anthraquinone Subltb. Bayer's Salttb.	1.75 1.00	- 1.85 - 1.10
-	Benzaldehyde, Tech	1.00 .75	50 - 1.10 80
	Benzylchloride	1.25 .30 .20	- 1.35 35 25
	Bromobenzenetb.	.40	42
	Chlorhydrin	5.80 4.95	- 2.50 - 6.00 - 5.00
	p-Dichlerobenzene	.15	20 25
	Diethylaniline	1.20	07½ - 1.25
-	Dimethylaniline, drums ext. 1b. Dimethylsulfate	.45	50 - 1.00 - 50
-	Dinitrobenzene	.25	27 30 35
•	is in the second	.00	30

	Land			
.00	Dinitrotoluenelb.	.25	-	.27
.75	Diphenylaminetb.	.65		.71
.00	Ethyl Bromidetb.	.45		.47
.50	Ethyl Chlorideb.	.55	_	.60
.40	"G" Salttb.		-	.80
.50	Hydrazobenzenetb.	1.35		1.50
.85	Methyl Chlorideb.	-	_	4.25
.45	Michler's Ketoneb.	4.00	=	
.20	Monochlorobenzene	1.10	_	1.25
.30	a-Naphthol, crudetb.	1.15	_	1.25
.00	Refinedtb.	1.45		1.50
.23	b-Naphthol, distilled	.32	_	
.50	a-Naphthylaminetb.	.35	_	.37
.15	b-Naphthylamine, tech tb.	1.40		
.65	Sublimedtb	2.25	_	2.50
.05	m-Nitroanilinetb.	.95	-	1.00
.25	p-Nitroaniline	.79	-	.82
.20	p-Nitroacetanilide			.67
26	Nitrobenzenetb.	.12	-	.14
10	o Nitrochlorobenzene	.35		.40
75	p-Nitrochlorobenzene	.30	_	.35
.85	Nitronaphthalenetb. p-Nitrophenoltb.	.30	-	.35
10	p-Nitrophenol	.75	-	.30
50	o-Nitrophenol	.75 2.90	-	3.00
10	m-Nitro-p-toluidine			4.00
.80	p-Nitrosodimethylaniline	0.00		
35	Nitrotoluene-s. Mixed	.15	_	.17
35	o-Nitrotolueneb.	.15	_	20
.25	p-Nitrotoluenetb.			.85
42	p-Oxy-benzaldehyde		-	2.00
16	p-Phenetidintb.	1.35	-	1.50
50	p-Phenylenediaminetb.	1.70	_	1.75
00	m-Phenylenediaminetb.	1.15		1.30
00	Phenyl-a-Naphthylamine fb.	2.25		2.30
20 25	Phosgenetb.	_		.75
071/6	Phthalic Anhydride	.40	_	.50
	"R" Salt	.60	-	.65
25	Resorcinol Technical	1.50	-	1.55
50	Sodium o-Chloro-p-toluene sul-	-		20
00 50	fonateb.	1.40	-	1.46
27	Metanilateb.	.70		
30	Naphthionateb.		_	
35	Picramate	.73		
30	p-toruene surronate	.00	_	.10

Aniline Dianisidine Dianisidine Dinitrotoluene Diphenylamine Nitrobenzene Ortho Toluidine Para Aminophenol Sodium Picramate E. I. du Pont de Nemours & Company, Inc. Dyestuffs Department WILMINGTON, DELAWARE New York Branch Office 8 Thomas Street Telephone Worth 3289, 3290

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SPOT DELIVERIES

Coal-Tar Dyes

Schaeffer's Sait D70 76	DIRECT COLORS: Black	Alizarin Red, 20 p.c. Paste.th60 - 1.00 Alizarin Yellow G th85 - 1.40 Alizarin Yellow R th125 - 1.40 Alizarin Yellow R th65 - 1.00 Chrome Black, Dom th65 - 1.00 Chrome Brown th50 - 2.00 Chrome Brown th1,50 - 3.00 Chrome Green, Dom th. 1,50 - 3.00 Chrome Red th. 1,75 - 2.00 Chrome Yellow th65 - 1.00 Gallocyanin th65 - 1.00 Gallocyanin th. 2,30 - 2.60 BASIC COLORS: Alkali Blue, cone th. 6.00 - 6.50 Auramine O th. 1,80 - 2.35 Auramine O th. 1,80 - 2.35 Auramine O th. 3,00 - 3,50 Bismarck Brown R th70 - 9
ACID COLORS: Black	Chrysophenin, Dom. 10, 2,00 -2,50 Congo Red 4B Type. 11 Diamine Sky Blue F. F. 10, 2,50 -4,00 Geranin 10, 875 -9,25 Oxamine Violet 10, 7,00 -8,00 OIL COLORJ: Black 10, 70 -1,00 Blue 15, 25 -2,00 Orange 15, 95 -1,00 Red III 10, 10, 10, 10, 10, 10, 10, 10, 10, 10,	Bismarck Brown G. 1,00 -1,22

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similar to pre-war Patent Blue, can be dyed neutral, acid, chromate, chrome mordant and afterchromed.

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a brilliant Blue especially of value in the production of bright Blue shades fast to fulling.

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of general interest to both wool and silk dyers on account of its level dyeing properties in a Sulphuric Acid bath.

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a very bright Red of especial interest in the production of Brown and mode shades.

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the well known Fast Yellow which is very fast to light and a very level dyeing color.

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Dyestuffs

Natural Dyestuffs

Annatto, fine			
Carmine No. 40tb.			
Gambier, see tanning.			
Indigo, Bengaltb.	_		
Oudestb.	1.90		
Guatemalab.	1.75		
Kurpahstb.	1.50		
Madrastb.	.85	-	.95
Madder, Dutchtb.	.25	-	.27
Nutgalls, blue Aleppo tb.	14	_	.15
Chinesetb.	.16	_	.17
Ouercitron Bark, see tanning. Turmeric, Madras			.071/2

Dyewoods

Barwood				.tb.	.05%	4	.0634
Camwood.	chips			tb.	.12		.16
Fustic, sti	cks		1	ton	37.00	-3	8.00
Chips	******			tb.	.04	-	.06
Hypernic,	chips			tb.	.065	4	.07
Logwood	Sticks		1	ton	30.00	-4	0.00
Chips				Ib.	.03	_	.05
Quercitron Red Saun	Bark,	see 1	anning	tb.	.20	_	.21

Dye Extracts

Note:	Range	of ran	pri	ces for	on	dy	guan	racte	in-
Archil.	Double					tb.	20	-	.23
Conce	ntrated					m.	.24	_	.27

Cutch, Mangrove, see Tanning Rangoon, boxes b. Liquid b. Tablet b.	.10	-	.18 .11 .14
Concentrated	.24	=	.26
Flavineb.	.90	_	1.25
Fustic. Solid		-	.28 .27 .15
Galltb.	.23	-	.25
Hematine Extract 51 deg lb.	.111	1-	.131/
Crystalstb.	.20	_	.27
Hypernic, Ilquid, 51 deg 7b.	.20	_	.30
Logwood, solidtb.	.15		.23
Osage Orange, Extract 42 deglb. Crystals	.09		.16
Persian Berries	.40	_	.42
Quebracho, see tanning.			
Powdered, 100 p.etb.			.081/2

Miscellaneous Dyestuffs

Albumen, Egg, edible			.60
*Technicalfb.			.45
Blood, importedtb.	-	_	.50
Domestic	.40	-	.42
Prussian bluetb.	.80	_	.85
Solubletb.	1.00	_	1.25
Spray yolktb.	.30	-	.35
Turkey Red Oil	.11	-	.15
Zinc Dust, prime heavytb.			.11
100-1b. tinsfb.	-	-	.11
520-1b. caskstb.	-	-	.10%
Carload lots th.	-	_	.091

Dextrins and Starches

British Gumper 100 fbs.	3.15	_	3.48
Dextrin; Corn, white or yellowper 100 fbs.	2.85	_	3.13
Potato white or canaryfb.	.07	_	.085
Sago Flourtb.	.04	_	.0434
Starch, Powd. bags100 fbs. Pearl, bags100 fbs.	2.28 2.18	=	2.56 2.46
Potato, Domesticfb. Imported, duty paidfb.			.05%
Tapioca flour, high gradetb. Medium gradetb. Low gradetb.	.023	4-	.05 .0314 .03

Tanning Woods

Algarobillaton	_	
Divi Diviton	42.00	-45.00
Hemlock Bark ton	16.00	-18.00
Mangrove, African, 38 p.cton	_	-35.00
Bark, S. Aton	_	
Myrobalans, J1ton		-25.00
J2ton		-20.00
B1ton	_	-24.00
B2ton	-	-19.00
R2ton	-	-17.00
Oak Barkton	20.00	-23.00
Groundton	-	-25.0L
Quercitron Bark rough ton	-	-10.00
Groundton	20.00	-25.00
Sumac, Sicily, 28 p.c. tonton	63.00	-64.00
Virginia, 25 p.c. tanton	60.00	-65.00
Valonia Cups 28-33 p.cton		-35.00
Beard, 40 p.cton		-43.00
Wattle Barkton		

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Cod Newfoundlandgal.
Tankstb.
Domestic, primegal.

Degras American ... 1b.
English ... 1b.
Neutral ... 1b.

21

13

Fixed Oils

Tanning Extracts			Herringgal. Horselb.	25 .05½05¾
Chestnut, clarified, 25 p.c. tan, tanks, f.o.b. wks	.02 — .0534— .09 — .071/4— .08 — .041/4— .08 — .041/4— .09 — .0534— .09 — .0534— .09 — .05	.06 .09½ .08¾ .06 .08½ .04¾ .04½ .05 .05½ .09½	Lard prime	1.0072665540554452522510090124094094075075
Tanks	.041/2-		Saponified	.4446
Barrels	.04 — .04½— .04½—	.05 .043⁄4	38 deg., cold testgal. 45 deg., cold testgal. Stearic Acid, single pressed.tb.	1.70 1.65 10
Clarified	.05 — .01½— .02 — .07½—	.013/4	Double pressed	10½11½6560 .6567 .04¼04¾ .03¼04¼

Grease	s. La	rds	Ta	11

	0	New	York	Markets)		
Grease,				tb.	.07 —	.07
					.04 —	
				1b.	.041/2-	
Bone 1	Napht	ha .		1b.	.033/4-	

	Lard City, Steam	-	.113/4
í	Compoundtb.	.103/4-	.11
	Stearine, lardtb.		.15
	Oleotb.		.103/
	Tallow, edibleb.		.083/4
	City, Special, loose	.061/4-	.061/2
	(Chicago Markets)	, ,	
	Tallow, edibletb.	.073/4-	.08
	City Fancytb.	.071/2-	.073/
	Prime Packerstb.	.07 —	.071/
	Grease, Choice White tb.	.063/4-	
	"B" Whiteb.	.05 —	.051/
	Yellowtb.	.04 -	.043/
	Brownb.	.031/4-	.033
	Bone	.021/2-	.0234
	Housetb.	.031/4-	
	Stearine, prime Oleotb.	.10 —	.101/
3	Lardb.	.11 —	.111/
5			

Vegetable Oils

Castor, No. 1 bblstb.	.11 —	
Casestb.		.12
No. 3tb.	.09 —	.091/2
China Wood Oil, bbls b.	.131/2-	.14
Coast, bblslb.	.11 —	.113/4
Orient to N. Y., bbls ib.	.113/4-	
Coconut Dom., Ceylon, bbls tb.	.10 —	
*Tanks, Spottb.	.09 -	.091/4
Cochin, bbls., Domtb.	.103/4-	.11
*Tankstb.	.10 —	.101/4
Manila, tanks, coast	.083/4-	.0834
Edible	.12 —	.123/2
Copra, Pacific Coast	.041/2-	.045/8
Corn, refined, bblsb.	.101/2-	
Crude Tanks Shipping pt. tb.	.071/4	
Barrelstb.	.073/4-	
Crude, bbls., N. Ytb.	.081/2-	.09
*Cottonseed, Crude, f.o.b		
mills in buyers' tanks!b.	.073/4-	.08
Prime Summer, Yel. bblstb.	.095/8-	.10
*Whitetb.		
Winter yellowtb.	.10 —	.103/
*Nominal		

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5 barrel lotsgal.	-	_	.78
Boiled, 5-bbl. lotsgal.	_	_	.80
Double boiledgal.		_	.81
Raw tanksgal.	-	_	.68
English, Shipments, bblsgal.	.65	-	.66
Olive, denaturedgal.	1.10	_	1.15
Ediblegal.	1.75	-	
Footstb.	.073/4		.081/
Shipmentlb.			.081/
Palm Lagos, caskstb.	.071/2		.08
*Benintb.	-		_
Nigerlb.	.06		
Palm Kernel, domestic Ib.	-		
Imported	.10		
Peanut Oil, refined			.11
Crude, f.o.b. mills tankslb.			.071/
"Oriental, coast, tanks ib.			.071/2
*Crude, Bbls., spotlb.			.081/2
Perilla, coast tanksb.	.073/4		
Bbls., N. Yb.			.10
Poppy Seedgal.	3.00 -		
Rapeseed, ref'd bblsgal.	.88 -		
Tanks CoastID.			
Blown, bbls., 8 lbsgal.	.921/2	_	1.00
*Sesame, domestic, ediblegal.			
*Imported	-		
Sova Bean, tanks Coast. Sep. tb.			.063/4
New York, bbls., crudeID.	.081/2-		
Edible	.091/2-		
Walnut, Crude	.11 -	-	.12

OTT. CAKE AND MEAL

OIL CARE AND B	LEILL	•
*Cottonseed Cake, f.o.b. Texas	_	_
f.o.b., New Orleans	_	-
Cottonseed, Meai, f.o.b. Atlanta	_	-37.00
Columbia	-	
New Orleans*on	-	-
*Corn Cakeshort ton		-000
Meal Chicagoshort ton	-	-30.00
Linseed cake, dom short ton	-	-45.00
Linseed Mealshort ton	46,00	-47.50
. Nominal		

Naval Stores

Fertilizer Materials

Ammonium Sulfate, Bulk & dble. bags100 lbs.	1.90	- 2.40
Blood, dried, f.o.b. N.Yunit	_	- 3.00
Bone, 3 and 50, ground, raw.ton	30,00	-32.00
Cyanamide wksunit	_	-4.50
Fish Scrap, dom. drled, f.o.b. works	2.90	& 10
Nitrate Soda100 lbs.	_	- 2.15
Tankage, high-grade, f.o.b Chicagounit	2.50	& .10

Phosphate Rock- Florida pebble, 68 p.cton	5.00	- 6.00	
Tennessee, 78-80 p.cton		- 10	
Potassium muriate, 80 p.cunit	_	90	i
Shipmentunit	_		i
Sulfate unit	1.20	- 1.35	í

Metals

Aluminum 98-99% Virgin cwt. 20.00	-21	1.00
98-99% Remeltedcwt	-	-
Remelted No 12		
Powderedcwt	-	
Antimony, Jap. & Chinese.cwt. 4.50	- 4	.60
Bismuth, (See Fine Chemical Prices)	
Cadmium	- 1	50
	- 1	.25
Copper Prime Lakecwt. 12.00	-12	.25
Électrolyticcwt	-12	.00
Castingcwt	-11	.50
[ridium	-160	.00
	- 4	.40
Open Mkt. Pricecwt	4	.40
Magnesium, 99 p.ctb	- 1	.65
Manganese oreunit .25	-	.35
	-44	.00
Nickel Ingotcwt	-41	.00
Shotcwt	-43	.00
Electrolytic	-45	.00
Palladiumoz. 51.00	55	.00
	-78	
Silveroz	-	9436
Foreign	-	.62
Tin Straitscwt	-26.	.00
	-	-
American, purecwt	-	_
99 p.c. purecwt. 26.00	-27.	.00
Tungsten, ore per short ton unit		
	- 3.	
Bolivian	- 3.	
	- 3.	
	-	
	-	
Spotcwt	- 4.	.50

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		_	_	Lacine
MISCELLANEO	JS			Isinglass, Russian
Anna Anna Wa 1 th			.65	
Agar Agar, No. 1		_	53	Kamala
No. 3tb.		_		Kola Nuis
Agaric, whitelb.		_		Leeches
Almonds, bittertb.	24	-	.26	
Sweet	-	-	.35	Lupulin .
Mealtb.	_	-	.35	Lycopodius
Ambergris, blackoz.		-		Manna, la
Grey	-	-2	5.00	Small fla
Areca Nutstb.	.08			Moss, Ice
Powderedtb.	.13		.14	Irish, B
Balm of Gilead Budstb.		_	.75	Musk, poc
Burgundy Pitch, Dom	-			Tonqui
Cantharides, Chinese		_	.75	Grain, C
Powderedtb.		_	.80	Tonqui
Russian, wholetb. Powderedtb.	2.15	-		Synthetic.
Cascara Amarga	2.13			Nutgalls.
Castoreum	_		4.00	Aleppy
Charcoal Willow, powderedtb.		_		Nux Vom
Wood, powdereg			.041/2	Powder
Civetoz.	2.75		2.90	Ouassia C
Cochineal, U.S.P	.45		.55	Sandalwoo
Colocynth, Apples fb. Pulp, U.S.P fb.	.30		.35	Ground
Spanish Applesfb.	***		-	Scammony
Cuttlefish Bone, Trieste tb.	.18	-	.20	
Jewelers, largetb.	.75	_	.80	Spermaceti
Smalltb.			.80	Storax, li
Frenchtb.	-18		.20	Gen., U.
Dragon's Blood, Mass		_	.33	Tamarinds
Reedstb.	.70	_		Kegs
Ergot, Russianb.	1 20	_	1 25	Tar, Barb
Spanishb.				Turpentine
Grains of Paradiseb.	.16		.17	Artific
Guarana	_	_		Spirits, Se
Living Carrie	_		.40	Nominal

1				
ļ		.22		
١		.22		.25
ı	Isinglass, American (see Agar A			
į	Russianlb.	-		
ì		-		
ı	Kola Nuis, West Indies	.06		
	Leeches	.60		
i		.00		
		2.85		
į		.73		.75
	Small flake			.45
	Moss, Icelandtb.			
				.09
	Irish, Bleachedlb.			
	Musk, pods., Cabardineoz. 10			
i	Tonquin			
	Grain, Caboz. 25			
	Tonquinoz. 33		-3	5.00
	Synthetic, See Aromatic Chemle			
	Nutgalls, Chineseb.			
	Nux Vomica, wholetb.	.13		
	Powderedtb.			
	Quassia Chipstb.	.10		
	Sandalwood, Chipslb.		_	
	Groundlb.			.40
	Scammony, resintb.		_	
	Spermaceti, blocks	.28		
	Storax, liquid tech		_	
	Gen., U.S.Ptb.			1.75
	Tamarinds, bblstb.	.031		
	Kegsper keg			4.25
		1.75		
	Turpentine, Venice, Truetb.			.90
	Artificialtb.			.11
	Spirits, See Naval Stores			
	Nominal			

BALSAMS

Con	ail	าล			1	p	a			1														Ħ		.25	-	.27
Cop	Sot	u	tl	1	ľ	1	1	n	n	e	r	i	c	a	1	ì	•	,						it).	.31	_	.32
Fir,	C	a	î	12	3	d	a	ı									٠			0		•	g	a	1.	12.00	-	3.00
																										1.40		
																										1.40		
Toli	1 .					٠	٠																	п	١.	.30	_	.35

BARKS			
Angosturalb. Basswood Bark, pressedlb.		_	.25
Barberry (tree)		=======================================	.28 .12 .30 .17
Buckthernlb. Canella albalb.	_	_	
Cascara Sagrada Mb. Cascarilla, quills Jb. Siftings Jb. Chestnut Jb. Cinchona, Red quills Jb. Broken Jb.	.093	- - - - -	.35 .25 .10 .35 .30
Yellow, U.S.P. lb. Condurango lb. Cotton Root lb. Cramp (true) lb. Cramp (so-called) lb.	.16	11111	.10 .17 .45
Dogwood, Jamaicalb. Elm, Select, bdlsb. Grindingb. Powderedb.	.30	11111	.10 .32 .16
Fringe Tree tb. Hemlock tb. Lemon Peel lb. Mezereon lb. Oak, red lb.	.07	====	
Whitelb.	-	-	.06



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Orange Peel, bittertb.	07 — .08	BERRIES	GUMS
Sweet		BERRIES	,
Prickly Ash, Southern		Cubeb, ordinary	Aloes, Barbadosb50
Northern		XXtb. 1.00 — 1.10	Capetb0010
		Powderedtb90 — 1.00	Curação, cases
Pomegranate of Rootfb.	17 — .19	Fish	
of Fruitb.		Horse, Nettle, dry	Ammoniac, tearsb 1.70
Sassafras, ordinarylb.		Junipertb033/404	Powdered
Selecttb.		Laurel	Arabic. firststb2627
Simaruba		Poke	Secondstb2223
Soap wholetb.	.07 — .08	Paspberries, dried	Sorts Ambertb09½— .10
Cuttb.		Saw Palmettolb1314	Powdered. U.S.Ptb1922
Crushedlb.	/-	Sloe	Asafetida, whole, U.S.P
Wahoo of Rootb.			Powdered
of Treetb.		FLOWERS	Benzoin, Slam
Willow, Blacktb.			Sumatra
Whitefb.	15	Arnica	Camphor, ref., See fine chem list
White Pine Rossed1b.	.06 — .08	Borage	Catechulb1012
White Poplartb.	04	Calendula Petals, Imp	Chicletb75 - 1.00
Wild Cherry-		Chamomile German	Damar
Thin Green Rossedtb.	.16 — .18	Hungarian	Euphorbium
Thick Rossedtb.	.10 — .12	Roman	Powdered
Thin Natural	.09 — .10	Dogwood	Galbanum
Witch Hazeltb.		Elder	Gambier
Witch Hazel	08	Insect, open whole	Gambogetb 1.00
22.4		Closed wholeth,	Guaiaclb3037
BEANS		Powder, Puretb3640	Hemi ek 15 183 — 90
Calabartb.	20	Flowers and stems, 50 p.c.th 25	Karaya, Powdered
Cassia Fistulab.	.071/208	Kousso	Kino
Castortb.	.03031/2	Linden, with Leaves	
St. Ignatiustb.	35	Without Leaves	Myrrh, Select
St. John's Bread	.0608	Malva, blue	Sortslb40 — .42
		*Blacktb 1.50	Olibanum, siftings
Tonka, Angosturatb. Paratb.	1.25 .90 - 1.00	Mullelntb75	Tearstb15 — .20
Surinamtb.	.8090	Orangetb75	Opium. See fine chem. list
		Peony, red	Sandarac
Vanilla, Mexican, wholetb.		Poppy, red	Storax, Tech. cases. See Misc'l. Drugs
Bourbonb.		Valencia	Thus
South American	2.25 — 2.35	Violet	Tragacanth, Aleppo firstlb. 3.40 - 3.50
Tahiti, Yellow Label	1.50 - 1.60	Tilla (see Linden)	Seconds
Green Labeltb.		*Nominal	Powdered

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.27 .23 .10 .22 .35 .75

1.50 .25 .12 1.00 .18

35 55 1.25 .06 1.00 .37 90 .22 .50 .45 .42 .12 .20

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SHELLAC				Laurel				ROOTS			
D. Ctb.	_	_	.80	Life Everlastinglb.	.28		.06	Aconite, U.S.Ptb.	****	_	.22
Fine Orange	.56		4-0-0	Lobelialb.	.20		.22	Aletris (Unicorn true)ib.	.40	-	.42
Second Orange	.54		.55	Maticotb.	_	_	.20	Alkanettb.	.17	-	.19
r. Ntb.	.48		.49	Marjoram, German	_	-	_	Althea, cuttb.	.10	4000	.12
Regular bleached	.56		.58	Frenchtb.	.11			Wholetb.	.10	-	.11
Bone Drytb.	.62			Motherwort Herblb.			.14	Angelica American	_	-	.19
Bone Dry	•02	_	*0.*	Pennyroyallb.	.08		.12	Arnicab.	-	College	.70
LEAVES AND HE	RBS	}		Peppermint, Americantb.	.14			Arrowroot, American	.04		.0412
A	.27	_	.28	Prince's Pinelb.		_		Bermuda			05
Aconite	.15		.16					Bamboo Brierlb.		_	
Balmonyb.	.17		.23	Plantainlb.		_		Bearsfoot	.06		.07
Belladonnab.	.09		.10	Pulsatillalb.		_		Belladonnatb.	.18	-	
Boneset, leaves and topslb.				Queen of the Meadow1b.		_		Berberie, Aquifolium1b.			.20
Buchu, shortb.	.85		.87	Rose, redtb.		_		Beth	.18	-	.19
Longtb.			_	Rosemarytb.	.047	-		Blueflagb.	.35		.36
Cannabis, true, importedfb.		-		Rue	.25		.30	Bryoniab.	.13		.10
American, (no assay)tb.				Sage, Dalmatiantb. Greektb.	.05		.06	Burdocktb.	.10	_	.11
U.S.Ptb.	-	_		Spanishtb.	.041		.05	Calamus, bleachedlb.		-	.42
Catniptb.	-	_	.12	Savorytb.	.10		.12	Unbleached, naturaltb.	_	_	.12
Chestnutlb.	_	_	.06	Senna, Alexandria, wholetb.	.70	_	.75	Cohosh, blacklb.	.08	-	.10
Chirettalb.	-	_	.24	Half Leaftb.	.24	-	.25	Bluetb.	.08	_	.10
Coca, Huanucotb.	_	_	_	Siftingstb.	.11		.12	Colchicum	.27		.29
Truxillotb.	_	_	.50	Tinnevelly, Jobbingtb.		-		Colombo, wholetb.	.02		.05
Coltsfoottb.	.08	_	.09	Grindingb.	.06		.09	Comfreytb.	.30	_	.35
Corn Silktb.	.07	_	.08	Powderedtb.	.09		.11	Culver'stb.	.15	_	.16
Damianatb.	.11		.12	Skullcap, Westernlb.	-		.20	Cranesbill, see Geranium			
Deer Tongue		=	.09	Spearmint, American		_	.20	Dandelion, Imported fb.	.10	-	.11
Eucalyptus		_	.06	Squaw Vinetb.	.20		.21	Doggrass, U.S.P1b.	.10	-	.14
Euphorbia Piluliferalb.			.12	Stramonium	.17	_	.18	Echinaceatb.	.35	_	.36
Grindelia Robustatb.		_	.10	Thyme Spanish			.061/2	Elecampanetb.	.14	_	.15
Henbane	.21		.22	Frenchtb.	.11		.111/2	Galangaltb.	.10	-	.11
Henna		_	.20	Uva Ursitb.	.04		.041/2	Gelsemiumtb.			.15
Horehoundtb.	.09		.10	Witch Hazelb.	.07	-	.08	Gentian			.08
Jaboranditb.		_	.38	Wormwood, importedtb. Yerba Santatb.	.15	=	.16	*Nominal			****
June 1	.00		100	i i cioa Banta	.14	_	.13	Nominai			

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				1				
Ginger, Jamaicatb.	.24	-	.25	Senegalb. Serpentarialb.	.75	=	.75	Foenugreek
Ginseng, Cultivatedlb. Northwestern wildlb.	6.00	_	8.00	Skunk Cabbage	.30	=	.32	Hemp., Manchurian
Southern wildtb.			7.00	Strippedb. Spikenardb.	.20		.50	Larkspur
Gold Sealtb. Powderedtb.	_	_	4.25	Squill, white	.05	1/2	.06	Lobelialb78
Hellebore, Black, Importedlb. White	_	Ξ		Stone	.06	=	.10	Mustard, Bari, Brown
Helonias (Unicorn false)tb.	.48	-	.50	Chinath.			.061/2	Yellow
Ipecac Cartagena	1.35	_	1.40	Unicorn false, See Helonias			,2	
Powderedb.		-		True, See Aletris				English, Yellow
Rio wholetb.	1.35	_		Valerian, Belgian		_	.12	
Jalap, wholetb.	.16		.22	Yellow Parillatb.		-	.30	Poppy, Dutch
Powdered, U.S.Ptb.	.23	-	.25	SEEDS				Turkish
Kava Kavalb. Lady Slipperlb.			.17	Anise, Levanttb.			-	Blue Indian
Licorice, *Russian, cutlb.		-	_	Star	_		.21	White Indian
Spanish natural bales tb.	.06		.07	Spanishtb.			.141/2	Ouince
Selectedb. Powderedb.	.21		.22	Annattolb.	.03	-	.031/2	Rape South Amertb04½06½
Lovagelb.			.50	Canary, Spanishlb.	_			Japanese, small
Manacalb.			.20	Morocco	_		.051/2	Domestic
Mandrake	.10	_	.11	Caraway, African	.06		.061/2	Sabadilla
Orris, Florentine bold	.081/		.09	Dutchtb.	.06		.061/2	Stavesacretb 30
Veronab.	.06	_	.061/2	Cardamom, bleachedtb.		- 1		Stramonium
Powderedb.	.08		.11	Decorticated	.40	-	.42	Strophanthus, Hispidustb
Fingers				Celerytb.	.14		.141/2	Kombe
Pellitorylb.	_	-	.08	Coriander, Bombaytb.	.33		.35	Sunflower, domestictb, .04½05
Pink truelb.	-	-	.90	Morocco, Unbleached		_		South American
Pleurisylb. Pokelb.	=	_	.09	Bleachedtb.			.09	
Rhatanytb.		-		Cumin, Levant	_	_	-	Worm, American
Rhubarb High Driedtb.	.22	_	.24	Dillb.		_		SPICES
Powderedfb.		-		Fennel, French	.08	_	.081/2	
Sarsaparilla, Honduraslb.	.48	-	.50	German		·		Cassia Buds
Mexicantb.		-		Ground th		-11	.75	China, Selected, mats
Scammony Roottb.	-	-	.051/2	*Nominal		_	.00/2	Cinnamon, Ceylontb1420
	==							

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Cloves, Zanzibar th. Amboynas th. Penang th. Ginger, African th. Jamaica, grinding th. Fancy Bold th. Japan th. Cochin lemon th. Mace, Slauw th. Banda, No. 1 th. Batavia th. Nutmegs, 108 th. Pepper, Black Sing th. White Peppers, Red, Mombasa th. Cherries Bombay th. Pimento, Select th.	- 25 .27 - 28 .4546 .4707 \(\) 22 \(\)25 .28 \(\)25 .28 \(\)29 .3132 .3334 .2425 .1516 .18 \(\) .98 .98 \(\)09 .19 \(\) .15 .2627 .1516 .1111 \(\) .15 .2627 .3233 .4449 .44 \(\) .15 .2627 .4627 .4748 .4849 .4949 .4049	Almond, Bi Bitter, f.f. Artificial Sweet Peach Ket Amber, Cru Rectlfied Anise Techr U. S. P. Bay Bergamot Artificial Birch Tar, Crude Bois de Ro
Bayberrytb.	.191/221	U.S.P.
Bees, white the Yellow, clean to Yellow, the Yellow, clean to Yellow, the Yellow to Yellow to Yellow, the Yellow to Yellow the Yellow to Yellow, the Yellow to Yellow to Yellow, the Yellow to Yellow to Yellow, the Yellow to Yellow to Yellow to Yellow the Ye	.35 — .38 .16 — .17 .17 — .15 .23 — .15 .25 — .26 .47 — .48 .47 — .48 .47 — .48 .48 — .15 .08 — .15 .08 — .15 .09 — .11 .09 — .11 .09 — .11 .09 — .10 .09 — .06 .09 — .06	Camphor, by Japanese Cananga, N. Rectified Caraway, R. Cassia Tech Lead, Fre Redistill (Caraway, Edited Lead, Fre Leaf Colores, Cansal Bottles Cloves, cans Bottles (Copaiba, U. Corlander, U. Corlander, U. Corton (Lubebs, U.S. Cumin Dill Erizeron Leaf Cores (Leaf Country

E	ssential	Oils	
Almond, Bitte Bitter, f.f. I Artificial	P.A. U.S.P., See A	Ph 5 00	_ 0 00
Sweet	el (Apricot)	.tb423	445 32
Amber, Crude Rectified Anise Technic	al	.tb. 1.00 .tb. 1.30 .tb45	- 1.05 - 1.40 55
U. S. P Bay Bergamot		.1b60	70 - 2.35 - 5.50
Birch Tar, Re	ect	.tb .tb. 3.75	
Bois de Rose Cade Cajuput, Nativ	ve	.tb. 3.00 .tb75 .tb60	- 4.50 90 65
Camphor, by-r	product	.tb09	75 103 26
Japanese who Cananga, Nati Rectified Caraway, Rect		.lb. 4.25	- 3.50 - 4.50 - 1.60
Cassia Techni	cal, U.S.P	. lb85	90 - 1.10 - 1.30
Cedar Leaf Cedar Wood, Cinnamon, Ce	light	.tb80	85 38 -18.50
Leaf Citronella, Ce	ylon	.1b. 2.00 .1b32	- 2.25 33 65
Cloves, cans .		.tb. 1.75	- 1.85 - 1.95 75
Corlander, U.S. Croton Cubebs, U.S. P.	S.P	.tb. 10.50	-11.00 - 1.20 - 7.00
Cumin Dill		.tb. 5.00	- 5.25 - 4.50

-			
-	Eucalyptus, Australian, U.S. Ptb.	.48	50
	Fennel, sweet. U.S.P	2,25	- 2.50
1	Geranium, Rose Algerian tb.	4.50	- 5.00
	Bourbon (Reunion)tb.	3.75	- 4.25
1	*Turkishlb.	-	- 4.00
1	Ginger	6.75	-7.00
1	Gingergrasstb.	-	-3.25
1	Hemlock	-	75
1	Juniper Berries, rect	2.00	-2.25
1	Woodtb.	.75	80
	Lavender Flowers, U.S.P b.	4.25	- 4.75
ı	Spike Spanishtb.	1.05	- 1.20
1	Lemon, U.S.Ptb.	.75	90
	Lemongrass, Native	.85	90
1	Limes, Expressed	3.25	- 3.50
1	Distilledb.	.55	65
1	Linaloe	2.75	-3.00
1	Mace, distilledtb.	1.10	- 1.25
1	Mirbane, ref., see Aromatic Ch	emica	
1	Mustard, naturalb.	_	-20.00
	Artificial	3.40	-3.50
1	Neroli, Bigaradeoz.	8.00	-25.00
1	Petaleoz.	10.00	-30.00
1	Artificialtb.	14.00	-15.00
	Nutmeg, U.S.Ptb.	1.10	- 1.25
1	Orange, bitter	2.25	-2.35
1	Sweet, West Indiantb.	2.75	-2.85
1	Italiantb.	3.00	-3.25
1	Origanum, Imitation tb.	.30	35
	Patchoulitb.	8.25	-9.25
	Pennyroyal, domestictb. Imported	-	- 1.75
	Importedtb.	1.20	-1.25
1	Peppermint Natural, tinstb. Redistilled, U.S.Ptb.	-	-2.00
	Redistilled, U.S.P	_	-2.25
	Japanesetb.		-1.15
1	Petit Grain, So. America tb.	2.00	-2.10
ļ	Frenchlb.	10.00	-11.00
1	Pinus Sylvestris	_	-2.00
1	Pumiliotb.		- 4.75
	Rose, Frenchoz.	10.00	-12.00
1	Bulgarianoz.		-9.25
1	Artificialoz.	2.50	- 2,73

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Savintb.	_	- 4.25
Spearminttb.	3.25	-3.50
Spruce	_	75
Tansy, Amertb.	7.50	- 8.00
Tar, bblsgal.	.30	32
Refined, U.S.P., cansgal.	-	- 1.00
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White, U.S.Ptb.		-1.25
Vetivert, Bourbon	6.00	-6.50
Wine, heavy	_	- 4.50
Wintergreen, sweet birchtb. Genuine Gaultheriatb.	3.00	- 3.25 - 5.50
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Wormseed Baltimore 1b.		
Wormwood Dom	13.00 12.00 25.00	-14.00 -15.00

Oleoresins

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Capsicumtb.	3.00	- 3.2
Cubebtb.	7.00	- 7.5
Gingertb.		
Maleferntb.		
Mullein (so-called)	-	- 5.00
*Oriss. domestic	-	-20.00
Importedb.	_	-22.00
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Vanillatb.	8.75	-10.00

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Lanolin anhydroustb.	.16	17
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Musk, Cab., grainsoz.	25.00	-27.00
Musk, Tonquin, grainsoz.	33.00	-35.00
Musk, Tonquin, podsoz.	18.00	-20.00
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Verona	.06	07
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Borneol .			 			9				.tb.	-	_	3.50
Citronellol			 		 					.tb.	10.00	-1	5.00
Citral			 		 		0 1			.tb.	3.50	_	3.60
Eucalyptol			 	0					۰	. ib.	.80	_	.85
Eugenol .										.tb.	3.25	_	3.50
Geraniol			. 4					 9		.tb.	2.00	_	3.50
Iso-Eugene	ol	,								.tb.	5.00	_	5.50
Linalool													
Menthol .													
Rhodinol										. tb.	12,00	-1	5.00
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Anisic Aldehydetb.	-	-6.00
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Free From Chlorine	_	- 2.00
Benzyl Acetate		- 1.75
Benzyl Alcoholtb.		- 1.75
Benzyl Benzoatetb.		- 1.75
Bromstyroltb.		- 6.50
Cinnamic Acldtb.		- 3.10
Cinnamic Aldehydetb.	-	-4.50
Coumarintb.	4.35	- 4.50
Importedtb.	4.25	- 4.40
Ethyl Cinnamatetb.	-	- 5.50
Geranyl Acetatetb.		- 6.00
Heliotropintb.	_	- 3.00
Indol. C. Poz.	_	-10.00
Linalvi Acetate	9.50	-11.00
Linalyl Benzoatetb.	_	-17.50
Methyl Anthranilate	4.50	- 5.00
Methyl Cinnamate	_	- 7.00
Methyl Paracresol	5.50	-10.00
Methyl Salicylateb.	.32	33
Mirbane, rect., drums extra.fb.		
Musk Ambretteb.	19.00	-21.00
Musk Ketonetb.	_	-15.00
Musk Xylenetb.		
Nerolintb.		
Phenylacetaldehydetb.		
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River National Bank, Genoa; 300 cs., Suther
land International Despatch, Genoa; 200 cs.,

Scaramelli & Co., Genoa; 650 cs., G. Pollio,

Genoa; 450 cs., F. Pastene & Co., Genoa;

30 cs., Adanizlo Bros., Genoa; 200 cs.,

Scaramelli & Co., Genoa; 650 cs., Bast

River National Bank, Genoa; 950 cs., Bast

River National Bank, Genoa; 950 cs., Bast

River National Bank, Genoa; 900 cs., Suther
land International Despatch, Genoa; 200 cs.,

Scaramelli & Co., Genoa; 650 cs., Bast

River National Bank, Genoa; 650 cs., OCHRE

Shanghai; 280 csks., East Asiatic Co., Shanghai; 1,275 bbls., Mitsul & Co., Shang-hai; 500 bbls., L. C. Gillespie & Sons, Shanghal; 463 csks., Van Merap & Co.,

Shanghai
DILS, ESSENTIAL—5 cs., Morana, Inc.,
Havre; 1 cse., Balfour, Williamson & Co.,
Shanghai; 5 drs., American Exchange National Bank, Southampton; 18 drs., 3 cs.,
Dodge & Olcott Co., London; Aniseed, 50
cs., Colgate & Co., Hongkong; Cassia, 100
cs., Anglo South American Bank, Hongkong;
50 cs., Colgate & Co., Hongkong; Lime, 3
cs., Huth, Gillespie & Co., St. Lucla; 1
csc., F. S. Maynard & Son, Dominica; 16
hlf. cs., Planters Produce Co., Dominica;
Orange, 40 cs., A. S. Lascelles & Co.,
Kingston hanghai LS, ESSENTIAL-5

PHOSPHORUS-100 cs., W. E. Miller, Ant-

werp
POTASSIUM SALTS—152 bbls., F. W. Simons & Sons, Antwerp; Bicarbonate, 150. csks., R. W. Greeff & Co., Rotterdam; 60 bbls., Superfos Co., Rotterdam; Bromide, 20 cs., Order, Hamburg; Caustic, 187 drs., Iscoga Chemical Co., Hamburg; Calorate, 67 csks., Order, Hamburg; 290 cs., Order, Hamburg; Chloride, 900 cs., American Krouger & Toll Corporation, Helsingfors; Murlate, 7,290 bgs., H. Vogel, Hamburg; Nitrate, 138 bbls., W. R. Grace & Co., Buenos Aires; Sulfate, 156 drs., Roessler & Hasslacher Chemical Co., Rotterdam 156 drs., Roess Co., Rotterdam

QUICKSILVER-40 flasks, Polllon & Polllon, Vera Cruz; 260 bottles, Leonhardt & Brush,

Vera Cruz; 260 bottles, Leonhardt & Brush, Genoa
ROOT—160 bls., A. Joensson & Co., Antwerp; Broom, 208 bls., Pearson Trading
Co., Vera Cruz; Jalap, 22 bgs., H. Triet,
Vera Cruz; Jalap, 22 bgs., H. Triet,
Vera Cruz; Sarsaparilla, 20 bbls., D. L.
Bretzfelder & Bros., Tampico
SAL AMMONIAC—9 bbls., Innes, Speiden &
Co., Rotterdam; 60 drs., Roessler & Hasslacher Chemical Co., Rotterdam
SEEDS—43 bgs., W. Van Doorn, Rotterdam;
5 scks., Order, Marseilles; 311 bgs., Ross
Seed Co., Copenhagen: 107 scks., J. Lonwith, Lyttelton; 112 scks., Irving National
Bank, Lyttelton; Caraway, 300 bgs., C. J.
Sperco & Son, Rotterdam; 100 bgs., Levy &
Lewls, Rotterdam; 100 bls., F. D. Nordlinger, Rotterdam; 200 bls., Habicht & Co.,
Rotterdam; 200 bls., Jaburg Bros., Rotterdam; 200 bls., Jaburg Bros., Rotterdam; 100 bls., F. H. Leegett & Co., Rotterdam; 100 bls., F. H. Leegett & Co., Rotterdam; 200 bgs., Catz American Co.. Rotterdam; 200 bgs., Order, Rotterdam; 500
scks., Order, Marseilles; Cumin, 24 scks.,
Order, Marseilles; Cumin, 24 scks.,
Order, Marseilles; Cumin, 24 scks.,
Order, Marseilles; Cumin, 24 scks.,
Order, Marseilles; Cumin, 25 bls., Midlax
Co., Rotterdam; 1500 bgs., S. L. Jones &
Co., Tlentsin; 1500 bgs., S. L. Jones &
Co., Tlentsin; 1500 bgs., S. L. Jones &
Co., Tlentsin; 1500 bgs., C. J. Sperco & Son, Rot-

terdam; 100 bls., F. D. Nordlinger, Rotterdam; 100 bls., F. H. Leggett & Co., Rotterdam; Rape, 50 bls., F. D. Nordlinger, Rotterdam; 217 bgs., E. J. Sperco & Son, Rotterdam; Sesame, 1,400 bgs., A. Norden & Co. Hankow.

Kotterdam; Sesame, 1,400 bgs., A. Norden & Co., Hankow SOAP-6 cs., Kopf Manufacturing Co., London; 3 csks., Order, London; 6,735 cs., Order, Antwerp; 44 cs., Bank of America,

Marseilles

SODIUM SALTS—Ash, 1,000 bgs., Order, Antwerp; Bromide, 22 cs., First National Bank, Hamburg; Hydrosulfite, 260 csks., Kuttroff, Pickhardt & Co., Rotterdam; Prussiate, 37 csks., Order, Liverpool; 60 csks., Order, Antwerp; 13 csks., Order, Antwerp; Sulfate, 93 csks., E. M. Sergeant Co., Hamburg; Sulfide, 72 csks., National City Bank, Antwerp

93 csks., E. M. Sergeant Co., Hamburg; Sulfate, 72 csks., National City Bank, Antwerp SPICES—Cassia, 500 bls., Dcarnhold & Co., Hongkong; 130 bls., McCormick & Co., Hongkong; 140 cs., Frank Tea & Spice Co., Hongkong; 1,250 bls., International Bank ing Corporation, Hongkong; Orbitis, F. W. Frost & Co., Hongkong; Chillies, 152 bls., British Bank of West Africa, Bombay; 50 bdls., Order, Bombay; Ginger, 160 csks., Order, Hongkong; 2,175 bgs., W. Brandt's Sons & Co., Bombay; 949 bls., Order, Bombay; Mace, 22 bbls., 3 cs., Frame & Co., Grenada; 45 csks., 14 bbls., Royal Bank of Canada, Grenada; 2 cs., Huth, Gillespie & Co., Grenada; 50 bgs., T. Scott & Co., Grenada; 50 bgs., T. Scott & Co., Grenada; 30 bgs., Royal Bank of Canada, Grenada; 100 cs., J. Petrocelli & Co., Genada; 80 bgs., Order, Singapore; Pepper, 100 cs., J. Petrocelli & Co., Genoa: Red, 913 bgs., Order, Bombay; White, 420 bgs., Order, Singapore; St., Singapore TALC—400 bgs., L. A. Salomon & Bros. Genoa: 200 bgs., C. A.

TALC-400 bgs., L. A. Salomon & Genoa; 200 bgs., C. Mathion, Genoa

TARTAR-35 csks., Tartar Chemical Works, Marseilles; 258 bgs., American Express Co., Bordeaux; Cream, 15 bbls., H. Hinrichs, Rotterdam

Rotterdam

WAX-35 bgs., Order. Liverpool: Bees, 26
esks., 5 cs., South American Shipping Co.,
Santos: Candellila, 231 bgs., Order, Liverpool: Carnauba, 207 bgs., American Trading Co., Rio de Janeiro; Japan, 260 cs., H.
R. Lathrop & Co., Kobe: Vegetable, 70 cs.,
Shema & Co., Kobe; White, 100 cs., Strohmeyer & Arpe Co., Havre

WHITING-2,200 bgs., Order, Antwerp WINE, MEDICINAL—100 cs., J. Wile Sons & Co., Rotterdam; 30 cs., U. S. Forwarding Co., Rotterdam; 10 cs., Order, London; 150 cs., Order, Bordeaux

ZINO—Nickelled, 10 cs., L. C. Hirsch & Co., Hamburg; Oxide, 100 cs.ks., Manufacturers Trust Co., Antwerp; 30 bbls., Relchard, Coulston, Inc., Antwerp; 30 bbls., Inter-national Ores & Metal Selling Corporation, Antwerp

New Incorporations

Beetle-Barnes-Baker, Inc., Lynn, Mass., capital \$30,000. To anufacture waxes. Lorenz F. Muther, William R. Beetle, 362 manufacture waxes. Massachusetts Ave.

Elite Chemical Co., Nashville, Tenn., capital \$10,000. To manuacture chemicals. E. B. Harper and Biscoe Griffith, Nashville. facture chemicals.

facture chemicals. E. B. Harper and Biscoe Griffith, Nashville.

Cambridge Tanning Co., Cambridge, Mass., capital \$100,000. R.

T. Bailey, Massachusetts ave. and Tannery st., president and treasurer: Joseph J. Hurley, secretary.

Velvet Specialty Co., 4708 Hastings street, Detroit, Mich., capital \$25,000. To manufacture paints, oils and polishes. Edward F. Callan, M. E. Jeynes and Thomas A. Jeynes, 5957 Stanton ave. Alexanlan Hoope Mfg. Co., South Bend, Ind., capital \$10,000. To manufacture chemicals. J. G. and M. G. Alexanian, South Rend.

Continental Chemical Corp., Watseka, Ill., has filed notice of increase in capital to \$25,000.

Ellis Drug Co., Manhattan, capital \$50,000. S. Ellis, J. Monahan, B. Eysler; attorney, E. E. Fuchs, 51 Chambers st.
William Mindlin, Jamaica, L. I., capital \$50,000. Drugs and medicines. W. and M. and C. Mindlin; attorneys, Podell, Anserge & Podell, 233 Broadway, New York.

Borough Drug Co., Brooklyn, capital \$30,000. S. Chelfetz, M. hassin, I. Estersohn; attorney, N. L. Goldstein, 30 Church st., Chassin York.

James' 44th st. Drug Store, Manhaattan, capital \$30,000. P. and M. Gavza, J. J. Smith; attorney, S. L. Zuekerman, 250 Broadway. Wanaque Drug Co., Manhattan, capital \$50,000. A. and J. Demartini, J. Bellocchio; attorneys, Heffernan & Donn, 25 W.

H. Suskind, Manhattan, capital \$100,000. Drugs and medicines.

B. and H. Wasser, H. Suskind; attorney, L. K. Wasser, 217

Keystone Extract and Distributing Co., Dover, Del., capital \$100,000. C. Duncan Vreeland, A. C. Rupp, Emil Hohn, Philadelphia. Incorporated by the Delaware Registration Trust Co. Vacuum Flotation Corp., Manhattan, capital \$50,000. To make chemicals and machinery. C. M. Chapman, C. S. Clark; attorney, C. P. Northrup, 31 Nassau st.

Victory Soap Jelly Co., Ilion, N. Y., capital \$25,000. W. and E. H. and W. B. Loomis; attorney, J. A. McFarren, Ilion.

Stenray Co., Manhattan, capital \$20,000. Drugs and chemicals. S. Yahrbloom, H. E. Apple, V. P. Mehta; attorney, M. Lustig, 154 Nassau st.

Guard Good Chemical Corp., Geneva, N. Y., capital \$10,000. L. H. and C. F. Guard, G. G. Goodelle; attorney, G. I. Teter, Geneva. Percival E. Falkingham, Manhattan, capital \$100,000. Drugs nd chemicals. P. E. and K. E. Falkingham, M. D. Craig; atorney, L. S. Posner, 15 Broad st.

Emil Feleur Laboratorles, Dover, Del., capital \$100,000. Talcums. Incorporated by the Corporation Guarantee and Trust Co., Phila-

Burdette Remedies Co., Tampa, Fla., capital \$50,000. Medicines, drugs and drug sundries. A. B. Burdette, C. A. Burdette, Lella Chancey, R. E. L. Chancey.

Columbus Chemical Co., Columbus, O., capital \$10,000. Emerson. Taylor, Charles R. Crees, L. Bergin, M. MacConathy, A. C. L. Taylor, C. Wittenmeler.

Parfumeric Dore, Portchester, N. Y., capital \$15,000. M. Break-stone, M. Pasquier, M. Silversteln; attorney, I. D. Shifrin, 110 W. 40th st., New York.

Newstadt Brothers, Dover, Del., capital \$99,000. Paints. Samuel Newstadt, Albert Newstadt, Wilmington, Del.; attorney, Harry P. Joslyn, Wilmington.

Marcel Freres, Rutherford, N. J., capital \$100,000. Perfumers.
William H. Welsh, Arthur H. Schmid, Chicago; William A.
Schmitt, Rutherford.

Nassau Fertilizer & Oil Co., Fernandina, Fla., capital \$500,000. J. B. Guess, Jr., W. H. Faust, Denmark, S. C.; A. L. Coleman, Silver Street, S. C.

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o., Rot-dlinger, & Son, Norden

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735 cs., merica,

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Books of Trade Interest

THE ANALYST'S LABORATORY COMPANION. By Alfred E. Johnson. 176 pages, 8 vo. Fifth edition. P. Blakiston's Son & Co., Philadelphia. 1921.

This little volume contains much of the data now included in the various chemical annuals with the exception of the long tables of physical properties. Factors based on the 1921 atomic weights for analytical calculations are the principal feature of the work. The information contained is quite valuable but it is to be regretted from the author's point of view that the same thing is to be had elsewhere in conjunction with much other equally valuable information.

THE MANAGEMENT AND THE WORKER. By George F. Johnson, Arthur H. Young, Wm. E. MacKenzie, W. S. Rogers, M. R. Lott, F. N. Macpherson, and others. 8 vo., 228 pages. A. W. Shaw Co., 1920.

Primarily designed to be of assistance to those who face problems in the management of their employees, it contains numerous plans and methods by which several employers have been able to preserve unity and satisfaction among the workers, and suggests ways that they may be applied. In a few cases the plans are described by the users themselves. The authors contend that an answer to practically any labor problem, can be found in the book. This statement is possibly a little broad but the volume doubtless contains much valuable material.

AMERICAN FOREIGN TRADE. By William F. Notz, Ph.D., School of Foreign Service, Georgetown University, and Richard S. Harvey, Ph.B., Law School and School of Foreign Service, Georgetown University. 8 vo., 593 pages. Bobbs-Merrill Com-pany, Indianapolis, 1921.

The work is intended as a practical guide book for teachers and students of foreign trade methods. The two laws which have affected American trade to a great extent, the Webb-Pomerene Law and the Edge Act, are discussed at length. American foreign trade policies are treated extensively and various phases of exporting are taken up. This is one of the first books of its kind and should prove helpful to merchants engaged in the export business, as well as students and teachers.

FERTILIZERS AND MANURES, By Sir A. D. Hall, M. A. F.R.S., formerly director of the Rothamstead experimental station, foreign member of the Royal Academy of Agriculture in Sweden. 8 vo., 384 pages. E. P. Dutton and Co., New York, 1920.

The author has written a book of great assistance to men whose work has to do directly with fertilizing, either the farmer or the senior agricultural student and teacher. He has been identified with one of the largest agricultural experimental stations in existence and uses the results of its discoveries throughout the text. The book is written in non-technical style and can be readily understood by anyone with a merely basic knowledge of chemistry. It is a good treatise on the proper application of fertilizers.

FINANCING AN ENTERPRISE. By Hugh R. Conyngton, Chairman of the Board, The Ronald Press Co., New York. 8 vo., 3 vol., 667 pages. The Ronald Press, New York.

This set comprises three volumes on financing an enterprise in business, the first volume being devoted to discussion of the enterprise; the second to the organization; and the third to the financing of the undertaking. The books are intended as manuals of information and suggestion. An analysis is made of the problems involved in the launching of an enterprise, suggestions are made as to capitalizing and organizing, and details of financing, selling stock, and dealing with promoters are discussed. The author has compiled his work from the experiences of business men, whom he has interviewed.

Patents

Copies of patents may be obtained as follows; United States, 5 cents each; send to United States Patent Office, Washington, D. C.; French, one franc; send to M. M. Belin et Cie, 56 Rue des Frances-Bourgeois, Parls, for patents of the years 1902-1907, and to L'Imprimerie Nationale, 88 Rue Vieille du Temple, Paris, for patents of later date. German, one mark; send to Patent Office, Berlin. British, eight pence; send to Patent Office, London. Postage must be sent for British patents. Stamps are not accepted in payment for U. S. patents. In ordering patents, the number, name of patentee and subject of invention must be stated.

Granted June 21, 1921
1,381,929—Thomas Midgley, Jr., Lancaster, Ohio. Method of making Hydrometers.

1,382,134—Benjamin E. D. Stafford, Pittsburg, Pa. Container for collapsible tubes. 1,382,135—Benjamin E. D. Stafford, Pittsburg, Pa. Collapsible tube and container for the same.

1,382,165-Howard B. Bishop, Media, Pa. The process of making fluorids.

1,382,296—Carl Jagerspacher, Basel, Switzerland. Azodyestuffs dyeing on mordants.
1,382,282—Henry M. Gabel, Cincinnati, Ohio. The process for making litharge and red lead.

1,382,318-Jesse N. Pringle, Ortega, Florida. Sanitary bottle-mouth guard. 1,382,494 Samuel Field, London, England. Purification of sine

solutions.

1,382,587—Robert Morse Withycombe, Penshurst, near Sydney, New South Wales, Australia. Toothbrush. 1,382,600—Arthur W. Schreiner, Brooklyn, N. Y. Siphon.

Granted June 28, 1921

1,382,618—Guido Blenio, New York, N. Y. Fireproofing solution.
1,382,679—Maximillan Charles Schweinert, West Hoboken, N. J.
Water bottle stopper.
1,382,686—Walter Grant Dixon, West Chester, Pa. Emulsifier.
1,382,808—Mathias Ovrom Sem, Christiania, Norway. The process
of precipitating aluminum compound.
1,382,825—Clinton E. Dolbear, San Francisco, Calif. Separation of
borax from potassium salts.
1,382,829—Wictor Lepher, Madison, Wisconsin, Manufacture of

1,382,922—Victor Lenher, Madison, Wisconsin. Manufacture of selenium oxychlorid.

1,383,059—George C. Bailey, Woodcliff-on-Hudson and Augustus E. Craver, Cliffside, N. J. The process of producing formaldehyde.

1,383,122-Merl W. Jones, New Lyme, Ohio. Dispensing-measure for liquids. 1,383,138-Robert D. Maddox, U. S. Army. Non-corrosive attach-ment for containers.

1,383,141—George H. Neidlinger, East Orange, N. J. Closing-guide for collapsible tubes.

1,383,264—Otto Rohm, Darmstadt, Germany. Solid Non-hygroscopic iron salt and the preparation thereof.

Granted July 5, 1921

1,383,710-Allan James Field, New York, N. Y. Dyestuff and process of making the same.

1,383,755—Milton B. Ounnett and Raymond A. Whitaker, Rochester, N. Y. The process of producing decolorizing-carbon.

1,383,864—Benjamin Schobel, New York, N. Y. Process for solidifying china-wood oll and the product thereof.

1,383,912—William T. Doyle, Boston, Mass. Apparatus for manufacturing acid phosphate or superphosphate.

1,383,912—William T. Doyle, Boston, Mass. Process for manufacturing acid phosphate or superphosphate.

1,383,990—Andrew Kelly, London, England. Manufacture of acid sodium pyrophosphate.

1,384,023—Herman Everken, Essen, Germany. Acid-resisting receptacle.

Granted July 12, 1921

Granted July 12, 1921 1,384,141-James H. MacMahon, Saltville, Va. Ammonia-soda process.

1,384,188—Gustav W. Goerner, Boston, Mass. Cellulose-acetate solution.

1,384,219—Robert Wilhelm Strehlenert, Gottenborg, Sweden. The process of treating waste liquor from sulfite-cellulose factories.

1,384,399-Einar Neerup, Chicago, Illinois. Hydrometer-syringe.

1,384,444—William L. Frazier, Boise, Idaho. Diabetes Remedy. 1,384,445—William L. Frazier, Boise, Idaho. Diabetes Remedy. 1,384,566—Henry F. Merrlam, Maplewood, N. J. The process of making contact sulturic acid.

A judgment for \$5,183 has been obtained by D. L. Weil, receiver, against the Drug & Dyestuff Corp. The suit grew out of judgments obtained against one Guile who organized the Drug & Dyestuff Corporation.

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JAPANESE DYE AND CHEMICAL INDUSTRY Chemical Co. Bayonne, N. J. writer in "Drug & Chemical Markets" return of dyestuffs into Japan was stoppe many recently after a three months of hostilities, says the Drughich he had exception?

When the import of dyestuffs into Japan was stoppe many recently after a three months of the permanent nature, as buyers show more confidence and are trading freely contained. Warkets, something like a panic occurretelligently German contained.

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THE PERFUMERY AND THE CHEMIST TO UPWARD Drug and Chemical Markets for November of the story of the essential oil

It is estimated that about 1,500 tons of pyrifery. Changes, Mostly Upward, two brief questions: "What have you in stock?" facture of incense, insect powder and mosquite minators. The estimated production in 1919 with could obtain for food crops, which induced them to the acreage devoted to the growing of pyrifer to an expect of the excess of the acreage devoted to the growing of pyrifer that a majority of the estimated brug and Chemical Markets, that a minimizer on the German and the estimated production in 1919 week:

A report on the German and the estimated production in 1919 week:

Only of the essential oil has takes:—Half the story of the essential oil arkets situation in New York this week can be told "When can you make deliveries?"

All L'INDUSTRIE CHIMIQUE —

Drug and Chemical Markets, that a majority of cloves has been advanced by and the control of the production of the essential oil arkets situation in New York this week can be told when can you make deliveries?"

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AIT L'INDUSTRIE CHIMIQUE =

The American Econo

Standardised Sale Contracts New York Opinion on a British Scheme

ue de matières colorante

Tariff League Against Dye Liu OUR enterprising New York contemporary, Drug and Chemical Markets, recently published a copy of the British Chemical Trade

The New York Times Ethyl Alcohol in Demand.

An unusually heavy demand for ethyl alcohol was evident here this week, Drug

In reply to criticism of the attitude which is opposed to the dye licensing stem, by Henry B. Thompson os. Tariff legislation was foster or establish to the control of the Mericasa parting and services customs manufactured by the control of the customs of the customs

Drug Stocks Being Liquidated. Liquidation in crude drugs is wide-prend, Drug and Chemical Markets will asy today, owing to the continuance of seavy imports at low prices. Holders re sperificing everything, and products which have had a semblance of firmness re weakening under the pressure of lots (ferred on the open market. Price movements in fine chemicals are still tending ments in fine chemicals are still tending

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and Chemical Markets will say today, at prices ranging from \$8 to \$9 a gal-CHINESE CHEMIST & DRU

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New York, Dec. 4—The Drug and Chemial Markets this week eays: Stocks of any important essential oils are scarce

Fine Chemicals Prices Drop. -ron-An fine chemicals a feature this waster that have been the lead taken by manufacturers in reducing price, and them and the first treatment of the feature of

CABLE - RECEIVED . TODAY . BY. DRUG . AND . CHEMICAL . MA RKETS . SAYS

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It is estimated, according to Drug and Chemical Markets, that is one chemist for every 5,000 persons in the United States, unical engineer for every 5,000 persons in the United States, unical engineer for every 5,000 persons. When it is one chemist for every 5,000 persons when it is one chemist for every 5,000 persons when it is one chemist for every 5,000 persons when it is one chemist for every 5,000 persons in the United States, unical engineer for every 5,000 persons when it is one chemist for every 5,000 persons when it is one chemist for every 5,000 persons when it is one chemist for every 5,000 persons in the United States, unical engineer for every 5,000 persons in the United States, unical eng terests have made during the last few year terests have made during the last few year that lays the golden eggs," says that lays the golden eggs, says the golden eggs, says that lays the golden eggs, says the golden eggs, says

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From "Drug and Chemical Markets" amounts approximate war normal consum

Synthetic Nitrogen in Germany

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